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Parents' use of behavior modification to enhance their children's self-concept of ability and academic achievement.

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PARENTS' USE OF BEHAVIOR MODIFICATION TO ENHANCE THEIR CHILDREN'S SELF-CONCEPT OF ABILITY AND ACADEMIC ACHIEVEMENT

A dissertation Presented

By

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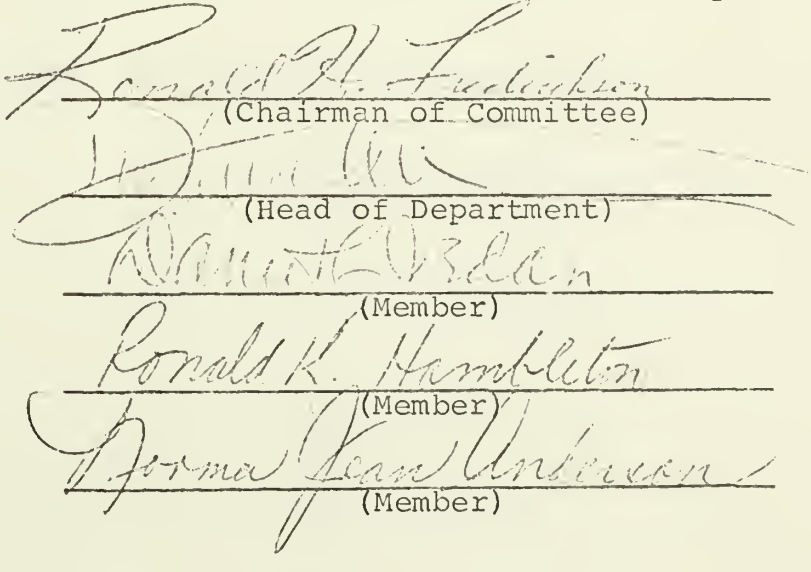

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Conducting this study, which was concerned with the use of reinforcement, was, in itself, a glowing example of how many "significant others" in my environment encouraged, helped and reinforced me.

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INTRODUCTION

The children of the United States have educational opportunities unknown to much of the world. Yet, one child in every four who starts school does not finish the U. S. accepted minimum--a high school education.

During the 1960's 7.5 million youngsters dropped out of school (Silberman 1970). Since drop-outs often have greater latent ability than the average student in school, this attrition is squandering some of the most valuable human potential of our youth.

One of the reasons children do poorly in school is a lack of confidence in their ability. Somehow they have learned to define a limitation about themselves which is often a gross underestimation of their real capabilities. This may then be extended into a negative self-concept which is manifested in an "I can't" attitude. When a child has a poor self-concept of his ability to do school work, the chances are he will do poorly. When he does poorly, it confirms this self-concept, and the cycle is complete.

Parents have a great deal to do with the formation of self-concept in their children. Through parents' evaluations and expectations, children learn how they are viewed by these very "significant others" in their lives. They learn to value those attributes which are reinforced by

their parents and to disregard attributes and behaviors that are ignored. Unfortunately, they develop many negative attitudes about themselves through harsh evaluations and overly-high (or low) expectations from parents. An example of this is the father who excuses his child's poor grade in spelling by citing his own deficiency with the familiar, "He's a chip off the old block". Another example is the mother who constantly compares her child with another child in the family with comments such as, "Why can't you do nice neat work like Suzy?". This kind of parent "help" usually produces an "I can't" or a "why should I even try" attitude which is evidence of a negative self-concept. Parents, more than anyone else, influence the development of their children's self-concept in the early years.

Brookover (1962, 1964) found that a child's self-concept of ability and his achievement in school, are positively and highly correlated--.42 for boys and .39 for girls. In fact, Morse (1963) and Haarer (1964) determined that self-concept of ability was a better predictor of school achievement than I.Q. Therefore, if low self-concept of ability is limiting academic achievement, and if low self-concept of ability is a product of the expectations and evaluations of "significant others", a change in the expectations and evaluations of "significant others" should result in a change in self-concept and in the limits of academic achievement.

A review of current literature makes it apparent that there has been very little research to find effective methods

of changing self-concept. One method that has been successful in changing mal-adaptive behaviors in children has not yet been attempted in self-concept research. This is reinforcement theory--better known as behavior modification.

It is not entirely surprising that the self-theorists such as Allport (1937, 1955, 1966), Rogers (1951, 1959, 1969), Combs (1963a, 1965) and Combs and Snygg (1959) would shun utilizing theories and practices from the camp composed of Watson (1908), Skinner (1953, 1961, 1963), Ullman and Krasner (1965, 1969) and Bandura (1959, 1963, 1969) since traditionally there has been a virtual fued between the two schools of thought.

However, it may be interesting to view, side by side, comparative postulates of the two theories. The seven self-concept postulates were distilled from the writings of Arthur Combs, Carl Rogers and others and compiled by Purkey (1967). The reinforcement theory postulates are this author's understandings of corresponding behavioristic viewpoints.

Self-concept	Reinforcement theory
1) The Self develops out of the individual's interaction and communication with his environment; it is a social product.	1) Learning takes place as a consequence of the reinforcers (positive and negative) that an individual receives following his responses to all stimuli in his environment.
2) The individual's perception of himself and his environment will determine his behavior.	2) The learned behaviors gleaned from the reactions and interactions of his environment will determine his behavior.

3) The individual's continuous struggle to maintain and enhance the perceived Self is the basic motive for all behavior; thus, people are always motivated.	3) Once a behavior is learned a person will react similarly to similar stimuli. If the reinforcement for that behavior is gratifying the behavior will be enhanced. (i.e. become more frequent and/or refined.)
4) The Self strives for consistency and behaves in ways which are consistent with itself; self-concepts are followed in a compulsive manner.	4) Learned behaviors tend to be consistent and responses to stimuli are mostly compulsive.
5) Learning is more rapid if it is perceived by the learner as related to positive aspects of Self.	5) Learning will take place more rapidly if the reinforcement is positive and, for most people, if the reinforcement is in the form of personal encouragement and approval rather than just correctness of task.
6) The Self determines what is perceived and the closer the experience to Self, the greater its effect.	6) Recognition and response to stimuli that relates to the individual is more acute.
7) The Self can be changed through school experiences.	7) Learned behaviors can be changed through school and other experiences.

It becomes apparent that the similarities seem to overcome at least some of the philosophical and semantic differences in the two theories. No attempt, therefore, will be made to evaluate the superiority of a concept of "self" as a human entity as opposed to an accumulation of learned behaviors. Rather, the parallels of especially the first and last postulates of both theories will be utilized--namely that self-concept and behaviors are learned and that both can be changed. This juxtaposition of principles makes it

reasonable to believe that techniques that have been successfully used to change or enhance behaviors should be applicable and effective to change or enhance some aspects of self-concept.

"Self-concept", according to LaBenne and Greene, "is a person's total appraisal of his appearance, background and origins, abilities and resources, attitudes and feelings, which culminate as a directing force in behavior." (1969, pg. 10) All of these appraisals have been learned through the expectations and evaluations of "significant others" who the same authors characterize as "people who most intimately administer the rewards and punishments in a person's life". (1969, pg. 14) It follows, therefore, that if the self-concept can change, the best prospects for effecting a change would be by "significant others". Since parents are among the most significant others, they are a logical choice for primary change agents.

Changing parents' behavior toward their children should offer a means of releasing children from the "cage" of negative self-concepts. However, since self-concept encompasses such a broad spectrum of attitudes and feelings, this study will concentrate on only one aspect of self-concept--that of self-concept of ability. Testing the efficacy of behavior modification principles and techniques to enhance self-concept of ability and academic achievement is the focus of this research.

Purpose of the Study

The purpose of this study is to test a method of changing the self-concept of ability of culturally-disadvantaged children by treating the parents of these children. The parents will learn behavior modification principles and techniques to purposefully enhance the self-concept of their children. Selected measures of self-concept of ability and academic achievement will be used prior to, and following, treatment of the parents and the results will be analyzed regarding the changes that may have occurred.

Significance of the Problem

Large amounts of money are currently being expended on programs for low achieveing, culturally-disadvantaged children. If many of these children do, in fact, have low self-images and thus have a built-in achievement limitation, as Brookover (1967) intimates, any program that does not deal with improvement of self-concept will be forced to operate within those limits set by self-concept.

It is imperative, therefore, to find effective ways to improve self-concepts if any program is to succeed in enhancing academic achievement of children whose self-concept is low.

Limitations of Study

As with any field research the study is limited by a number of factors. Major limitations include the following:

1. The research will be limited to a study of children and their parents for a period from November through April of a given school year.
2. The study will be conducted within one school system, using subjects who live in a culturally-disadvantaged area.
3. The sample is limited to children from four elementary schools whose academic grades in English, mathematics, social studies and science are below the mean.

Hypotheses

To compare the outcomes of the two parent-involvement programs as they affect the culturally-disadvantaged child, the following hypotheses will be tested:

1. There will be a statistically significant difference in parents' perception of their children as measured by the Michigan State Perception of Children Scale between parents who have taken part in a nine-session behavior modification workshop series (parent experimental group) and parents who have received only written material about parent-child-school relationships (parent placebo group).
2. There will be a statistically significant difference in self-concept of ability, as measured by the Michigan State Self Concept of Ability Scale (General), between children of parents who have taken

part in a nine-session behavior modification workshop series (experimental group) and children of parents who have received only written material about parent-child-school relationships (placebo group).

3. There will be a statistically significant difference in achievement, as measured by selected subtests of the Stanford Achievement Test, between children of parents who have taken part in a nine-session behavior modification workshop series (experimental group) and children of parents who have received only written material about parent-child-school relationships (placebo group).

4. There will be a statistically significant difference in the grade-point average in the subjects of English, mathematics, social studies and science between children of parents who have taken part in a nine-session behavior modification workshop series (experimental group) and children of parents who have received only written material about parent-child-school relationships (placebo group).

5. There will be a statistically significant difference in attendance rate between children of parents who have taken part in a nine-session behavior modification workshop series (experimental group) and children of parents who have received

only written material about parent-child-school relationships (placebo group).

C H A P T E R I I

REVIEW OF THE LITERATURE

Self-Concept Development

> Regard man as a mine rich in gems of inestimable value. Education alone, however, can cause it to reveal its treasures and enable mankind to benefit therefrom.
>
> Baha'u'llah

If parents regarded themselves as the prime educators of their children and utilized this quotation as the basis of their relationship with their children, one need not wonder about the effect on the self-concept of the children of the world. Unfortunately, most parents, and a surprisingly large number of educators, are unaware of the importance of self-concept and of the role they play in the formation of self-concept in children.

Brooks (1963) made the statement, "The child appears upon the human scene without self; the self is a social product conceived and born in the process of social interaction".

Notwithstanding the philosophical question of the innateness or the superimposed nature of the true self of man, it is becoming increasingly clear that self-concept--a person's total appraisal of his appearance, background, abilities, attitudes and feelings--is learned. That self-concept is learned and evaluative reactions of important

"others" play a significant part in this learning process was confirmed by Videbeck (1960), Helper (1960), Merrill (1965), Manis (1958), Davidson and Lang (1960), Shaw and Dutton (1965), Meyers (1966) and Brookover (1965). Merrill concluded that the most important group of social interaction is the family, for it is here the child acquires first impressions of human conditions. Brookover found significant positive correlation between a mother's perception of her child's ability and the child's own self-concept of ability, and Manis too, reported that a child's level of self-regard is closely associated with his parents' reported level of regard for him.

The formation of self-concept occurs early in life, well before entry into school. According to LaBenne and Green (1969), when a child enters kindergarten his present concept of self and his relationship to other children and to his teacher is profoundly affected by such factors as his social-class membership, family structure, parental behavior, ethnic background, religion and the language spoken at home.

Wattenberg and Clifford (1964) found that an unfavorable view of self and achievement is already established in many children before they enter first grade. It seems that boys in particular are oriented toward either success or failure, depending upon their self-concept, long before their first day in school , according to a report by Shaw and McCuen (1960). But, in a study of an equal number of first-grade black and white welfare children from matriarchal homes,

Carpenter and Busse (1969) recorded that black girls had significantly more negative self-concepts than white girls with the same socio-economic background. However, as they progressed from grade 1 to 5, white boys and girls, and black boys from this background had significantly more negative self-concepts.

The evidence seems overwhelming that children have developed an "I can" or an "I can't" attitude very early in life or, as Purkey (1970) states, "they have formed pictures of their value as human beings and of their ability to cope successfully with their environment. Like an invisable price tag, the child's self-image is with him wherever he goes, influencing whatever he does. For some children the tag reads: 'damaged goods'. For others it may read 'a fine value'.... Unfortunately many read, 'soiled, marked down' or 'close out, half price'."

Self-Concept and School Achievement

Perhaps the most searching studies of the relationship between self-concept and school achievement were done by Brookover and his associates (1962, 1964, 1965 and 1967). In the 1962 study using over 1000 seventh-grade students, he concluded that self-concept of ability functions independently of measured I. Q. in predicting school achievement. Results further showed that self-concept of ability is positively related to the image he perceives significant others such as parents, teachers and peers hold of him. At the

finish of his longitudinal study in 1967, Brookover was able to conclude that students who report low self-concept of ability rarely perform at above-average levels, but a significant proportion of those who scored themselves high in self-concept of ability do not perform accordingly. It seems, therefore, that confidence in one's ability is a necessary, but not a sufficient, factor in determining scholastic success.

Lecky (1945) was one of the first to show that low academic achievement was often due to a child's definition of himself as a non-learner. Conversely, Reeder (1955), Caplin (1969) and Lowther (1963) found that positive feelings about self are associated with good academic achievement. Frazier and Combs (1958) discovered that most failures in reading and spelling are not due to incapacity of the student; rather, they are due to his attitude toward the task of reading and spelling. He sees himself inadequate and so behaves inadequately. Another study that showed extremely high positive correlations (.72 with 3rd graders, .62 with 6th graders) between immature self-concept and reading disabilities was done by Bodwin (1957). Morse (1963) worked with black and white eighth graders and discovered some startling correlations. For G.P.A. and I.Q. the correlations were .40 for white children and .16 for black children, while for G.P.A. and self-concept, the correlations were .65 for white children and .43 for black children.

A large number of studies have been done especially

since 1960 with high-ability, low-achievers; including, Walsh (1956), Shaw and Alves (1963), Combs (1964), Shaw, Edison and Bell (1960a), Teigland (1966), Fink (1962), Durr and Schmatz (1964), and Taylor (1964). All seem to have similar conclusions that especially male low-achievers see themselves as less adequate, less accepted by others and find their peers and adults less acceptable. They have a more negative self-regard when matched with high achievers of comparable ability.

Taylor did a review of the literature to 1964 on personality traits and discrepant achievement and reported that the underachiever generally has a depressed attitude toward himself, feelings of inadequacy and inferiority, and is self-derogatory.

Some interesting differences among females were detected, however. Shaw, Edison and Bell found that 21 high-school female achievers exceeded 27 underachievers on the Sarbin Adjective Checklist in only two adjectives: ambitious and responsible. Female underachievers exceeded achievers on: fussy, confused, hardheaded, loveable, moody, jolly, unselfish, anxious, mischievious, kind, pleasure-seeking, soft-hearted, easy going and considerate. Such ambivalent outcomes for females made interpretation difficult. Shaw and Alves did a similar study to verify the above results using, this time, the Bill's Index of Adjustment and Values. The male results were confirming: male underachievers were clearly less accepting of self. But, females showed a

somewhat different perceptual mode. Female underachievers' negative attitudes seem to be centered on others' perceptions of themselves, while male underachievers' negative perceptual attitudes revolve primarily around themselves.

The difference in male/female perceptions of themselves is also exhibited by the relative onset of underachieving. Shaw and McCuen (1960b), in studying the records of a group of 11th and 12th-grade students, discovered that significant differences showed up between male achievers' and underachievers' grade-point averages, beginning in the third-grade. There were no significant differences between female achievers and underachievers prior to the 9th-grade.

Although the problem of low self-concept and low achievement seems to have implications for all school children, the difference in the nature of the self-concept deficiency, and the time in life when it becomes manifested in low achievement, should be of particular import and concern to educators.

In a comparative study by Harding (1966) of white male students who either stayed in school or dropped out, his results showed that drop-outs had significantly lower self-concepts of their academic ability when I.Q. and G.P.A. were factored out. In this summary he said that a student's attitude toward his ability to achieve in academic endeavors is a critical variable in predicting whether a student will continue in school or drop out.

Although all of these studies seem to be saying that a

positive self-concept is vital to academic achievement, Pietrofesa (1969) takes an even broader view. He sees "one's conception of self being of fundamental importance in determining perception of the outside world and behavior in that world." He believes it is absolutely necessary for teachers, parents and other significant adults to develop positive self-concepts in youngsters. "Every individual strives to maintain a certain amount of consistency in his behavior. Therefore, if a child sees himself as worthwhile and good, he will have to behave in that way for to do otherwise would create inconsistencies."

Cause and Effect

There seems to be little doubt that there is a significant positive relationship between self-concept and academic achievement. There is, however, reason to ask the "chicken or the egg" question--is low achievement a cause of negative self-concept or is negative self-concept a cause of low achievement?

Self-concept effects on achievement:

A study by Wattenberg and Clifford (1964) measured the self-concepts and intelligence of 128 kindergarten children in two schools, one of which served lower-class youngsters. They used self-referent statements obtained as the children drew pictures of their families and as they responded to incomplete sentences. Two dimensions of self-concept were obtained:

competence and goodness. These scores were then related to their beginning achievement in reading during the second grade. The kindergarten self-concept measures appear to be antecedent to and predictive of reading achievement in the second grade. These measures were better indicators of future success in reading achievement than intelligence scores. Morse (1963) and Haarer (1964) also detected that self-concept of ability was a better predictor of school achievement than I.Q. Morse's subjects were eigth-grade black and white children, while Haarer's subjects were male ninth-graders in both public schools and institutions for delinquents. The same results were applicable for all groups and settings.

Brookover (1965) worked with parents to improve the self-concept of their children and found that changes in the self-concept of ability are associated with parallel changes in academic achievement.

Self predictions of academic achievement by college students was revealed by Keefer (1966) to be better predictors of college achievement than high school grades and the American College Test scores. This self-attitude measure lost less of its predictive accuracy after the freshman year than grades and achievement scores.

Achievement effects on self-concept

It is not surprising that there is also ample evidence

that a change in achievement will change self-concept. Gibby and Gibby (1967) chose 60 white students from two seventh-grade classes for the academically-superior student. Both classes were given three tests: the Gibby Intelligence Rating Schedule, an English grammar test and a test of word fluency. Three days later both classes were again given the word fluency test. However, just prior to the second test each member of one class, the experimental group, received written notices that they had failed the previous test. (None of these students had ever failed in school, and all were aware of their special abilities.) Results of the second test showed the experimental group performed less effectively. Self-referent statements indicated that the experimental group also regarded themselves less highly and tended to believe that significant others did not regard them as highly either. Thus, the negative effect of even a contrived failure was reflected in lowered self-concept and reduced cognitive function.

Low achievers, too, tend to acquire a lower self-concept following failure. Centi (1965) studied the self reports of college freshman before school started and after their first-semester grade reports. Those receiving poor grades dropped in self esteem. They tended then to rationalize their performance: first, with dissatisfaction with the course and the teacher and finally, with the school and their classmates. Further

decline in their academic achievement occurred as they avoided study and spent time in other activities.

Success experiences have been shown to enhance self-concept. Diller (1954) found this true with college students, and Carlton and Moore (1966, 1968), who worked with culturally-disadvantaged children, realized similar results. The later study also showed that the change in self-concept was relatively permanent.

Diller (1954), Stotland and Zander (1958), Borislow (1962), and Dyson (1967) have also examined the effects of success and failure on a person's self-concept, and all have shown general agreement that students who do not perform up to their own expectations suffer loss of self-esteem.

The obvious conclusion to the cause and effect problem is that it is a two-edged sword. Low self-concept will assuredly produce poor achievement, and poor achievement will certainly produce a lowered self-concept. The really positive note in this conclusion is the implication for parents and teachers. These "significant others" apparently have the option to induce positive changes in children two ways: by enhancing a child's self-concept it is likely that academic achievement will follow, by designing success experiences for children their self-concepts will improve.

Self-Concept and the Culturally Disadvantaged

Concern about culturally-disadvantaged children and their success in school is a rather recent phenomena. That poor kids are usually "slow", "unruly" and "apathetic" was, and in many schools still is, the accepted norm of teacher opinion.

Leacock (1969) wrote cogently about her observations in city schools. She was struck "by the fact that standards in low-income Negro classrooms were low for both achievement and behavior." These kinds of expectations from teachers, white and black, are a "prejudice of class" and result in the vicious circular formula of low expectations = low achievement = low expectations.

The teachers in low-income black schools not only taught less, they evaluated their students' work less than half as frequently as teachers in middle-class schools. These evaluations were mostly negative--the ratio being three negative comments to every positive one--compared to middle-class rooms, where, according to Leacock, teachers offered positive evaluations more times than negative.

Hollingshead (1949) and Opstad (1961) noted that the distribution of low and failing grades among lower-class youth is substantially greater than would be predicted from indices of intelligence. It is no wonder as Shoben (1965) said, that "about 75% of lower-class pupils in first grade, including those whose class membership is related to ethnic status, drop out before finishing high school, most of them

before beginning their eleventh year".

Davidson and Lang's (1960) experimentation with children's perceptions of their teachers' feelings toward them revealed a positive and significant correlation with self-perception. The subjects were 4th, 5th and 6th-grade New York City youngsters. The more positive the child's perception of his teacher's feelings, the better was his achievement and behavior. Since upper and middle-class children perceived their teachers' feelings toward them more favorably than low socio-economic children, it followed, of course, that social class position correlated positively and highly to achievement in school. However, the favorability mean, an average of perceived teacher feelings based on the Checklist of Trait Names, decreased as achievement decreased, regardless of social class, and this mean also declined with social class, regardless of achievement.

Soares and Soares (1969) published a study of culturally-disadvantaged children that showed higher self-perception among the disadvantaged than advantaged youngsters. Since the consensus of many works prior to this seemed to indicate the opposite to be true, this new information created a controversy concerning the merits of the Soares' work. Long (1968) wrote a critique of the study which was rebutted by both Soares and Soares (1970) and by Greenberg (1970) whose work was also referred to by Long.

Greenberg compared good achievers and poor achievers from a population of disadvantaged children. Her original

findings, Greenberg (1965), also were in the unexpected direction, with low achievers expressing more positive attitudes on a semantic differential scale. In a subsequent similar study, Davidson and Greenberg (1967), self-concept was measured using a Self-Appraisal Scale consisting of 24 adjectives or phrases and a three-point scale that asked, "you think you are that way 'Most of the Time' or 'About Half of the Time' or 'Hardly Ever'". On this instrument the good achievers were clearly more favorable in their ratings than the poor achievers. Her explanation for the difference in the results was the different measuring instruments. In the semantic differential the subject would have to rate "myself" as "good" or "bad" with appropriate intermediate positions. On the Self-Appraisal Scale a child need not categorize himself as a certain kind of person, but merely report that he is happy "hardly ever" or lazy "most of the time." Greenberg felt that the later instrument is more behaviorally and operationally defined, and may make the admission of negative feelings more tolerable. The poor achiever may be less likely to react with inflated positive ratings where there is less threat.

Since Soares and Soares used a modified semantic differential instrument, Greenberg suggests that this may be the reason for their unexpected results. The Soares and Soares reply to Long's critique, however, cites other studies that support their position; namely, Carter (1968), Trowbridge (1970) and several others by Soares and Soares. Long was

also faulted for citing Coopersmith (1967) and Rosenberg (1965) as being opposite to Soares' findings. Rosenberg is quoted by Soares as saying, "Negroes.....do not have particularly low self-esteem", and Coopersmith, as saying, "It appears that the broader social context does not play as important a role in interpreting one's own successes as has often been assumed." Both found weak relationship between social class and self-esteem.

One interesting reason given by Soares and Soares for substantiating their findings is the possibility that fewer pressures and lower expectation levels are placed upon the children of disadvantaged groups, making it less surprising that they do not look upon themselves negatively. Also, Soares' study compared advantaged and disadvantaged groups and not achievers and poor achievers as in the Greenberg research.

Although the majority of the investigations of culturally-disadvantaged children do seem to suggest that they possess a lower self-concept (Davidson and Lang, 1960; Carpenter and Busse, 1969; Deutsch, 1967; Long and Henderson, 1968; Ziller, 1969), it appears that the certainty of this assumption is at least in question.

The next section of this study suggests that self-concept can be changed. Perhaps a new outlook by some parents and teachers has already made differences in the self-concepts of children in certain localities. That a change in self-concept occurs at crucial junctures, such as graduation

from the more parochial elementary school to the more cosmopolitan high school, is also a real possibility that has not been adequately investigated.

Changing Self-Concept in Children

Although the literature is rich in studies showing the relationships with, and causes and results of, positive and negative self-concepts, a virtual desert lies in the area of attempts to specifically change self-concept. Leonard, Pietrofesa and Bank (1969) conducted a workshop in Detroit, sponsored by the Developmental Career Guidance Project, to train teachers to improve the self-concepts of inner-city youngsters. Ten schools and fifty elementary teachers participated while counselors and university consultants provided the leadership. It was a four-hour program consisting of a one-hour lecture by university consultants, one hour of discussions in small groups led by the counselors, and a two-hour work session by participants to develop classroom materials to foster student self-understanding. Following the workshop teachers said that the experience had changed their teaching practices. They also felt that their students seemed to develop greater self-understanding, and that individual self-concepts were positively affected as a result. However, these were strictly subjective evaluations with no hard objective data to support the stated results.

Brookover (1965) made a genuine effort to not only question if self-concept can be enhanced, but also, to measure

which of three methods would produce the best results. The three approaches he used on a population of low-achieving ninth-grade students included: 1) training their parents with a series of lectures, films and discussions on the self-concept of their children; 2) introducing an "expert" who directly communicated enhancing information about the individual's ability; and 3) providing a "significant other" in the form of a counselor who would supply high academic expectations and evaluations.

Only in using the first approach, the treating of parents, was there any significant change in the self-concept of ability of the children. Not only was self-concept enhanced, but academic achievement measured by grade-point average also improved.

The treatment was administered to the parents of 21 ninth-grade students in the form of seven group meetings and two individual interview sessions held at the mid-point and at the end of the nine-month program. The goals of the parent meetings were:

1. To help the child to acquire an enhanced self-concept of academic ability.
2. To develop in the parent a recognition that his child's academic weakness could be improved.
3. To effect a greater parental feeling of confidence and responsibility for maximum student achievement.

Although the improvement in achievement was not maintained when treatment was discontinued, it was concluded that

parents, being one of the most "significant others", can influence and change the self-concept and hence the academic achievement of their children.

In Coopersmith's (1967) "The Antecedents of Self-Esteem" he lists the three home environment characteristics that have strong influences on a child's self-concept: parental warmth, respectful treatment and clearly-defined limits. He also detected that factors such as amount of punishment, amount of time spent with parents, physical attractiveness, height, education, income, social class or ethnic background have little effect on the formation of high self-esteem (Coopersmith 1969). Again, the influence of the home was the most important factor.

The only other study found, that was specifically designed to measure the change in self-concept of groups of children, was an advanced summer study program that Frankel (1964) conducted for talented high school students. Using the Inventory of Students Attitudes, he found an increase in self-perception and esteem as a result of a stimulating summer study program for these selected youths.

Although no research was found that used standard achievement tests or attendance as measures of change resulting from enhancement of self-concept, it seems that these variables may give further insight into the viability of methods used to improve self-concept.

These few recorded studies do little to help make a judgement about the most viable way to change the self-concept

of children. Having worked with teachers using behavior modification to change children's behavior in the classroom, there is reason to believe that behavior modification is another and apparently untried approach to change self-concept. And, since in at least one study parents were the most successful technicians in producing results, perhaps parents should be the ones to use behavior modification principles and techniques to enhance their own children's self-concept.

Behavior Modification

Articles describing the use of behavior modification are now found in abundance in most educational and psychological journals with at least two, the Journal of Applied Behavior Analysis and Journal of Experimental Analysis of Behavior, devoted exclusively to the topic. Results of behavioral studies covering a wide variety of child subjects have been reported by authors such as Bandura (1969), Grossberg (1964), Krasner and Ullmann (1967), Krumboltz and Thoreson (1969), Wolpe (1969), Wolpe, Salter and Reyna (1965) and Yates (1970).

While the majority of the studies have confined themselves to school and clinic settings, it has been shown that since the home environment plays such an important part in a child's life, parents should be actively engaged in treatment programs whenever possible.

Cantrell et al. (1969), Edlund (1969), Hawkins et al.

(1966), McKenzie et al. (1968), Zeilberger et al. (1968), Wahler (1969), Bernal et al. (1968) and Terdal and Buell (1969) all utilized parents as therapists in the home with significant results. In Terdal's experiment he trained mothers of retarded children to observe their own children's behavior, eliminate problem behaviors and build appropriate behaviors. He said, "It is obvious that parents constitute a large portion of a child's social environment and they have control over a variety of potential reinforcers. Behaviors which are followed either inadvertently or intentionally by one or more of these reinforcers will increase in frequency whether they are adaptive or disruptive. Teaching parents to observe carefully and to respond at times when adaptive behaviors appear in their child's repertoire will increase the child's chances of learning a significant number of skills."

And, as Barnal pointed out, it seems unnecessary to blame a mother for her child-rearing mistakes without the offer of some alternative as to what she can do that is helpful. "Training a parent to respond in new ways to her child emphasizes the parent's success and minimizes dwelling on previous mistakes."

If parents can be trained on an individual basis to learn and use reinforcement theory successfully with their own children, the training of parents in groups seems even more desirable and efficient. Hirsch and Walder (1969) have given the first indication that groups of parents can master

the principles and techniques. Thirty upper middle-class parents of disturbed children were attracted through an ad in the newspaper. They paid $50. each as a deposit to be refunded if their attendance was perfect over the nine 1 1/2-hour sessions covering five weeks. There was 100% attendance. The thirty parents were assigned to groups of either five or 10 persons. The meetings consisted of highly-organized lectures on principles of modification of human behavior, plus discussions of each subject's child, and advice on how to deal with the major problem behaviors of that child. Before the meetings began, each parent had chosen one or two very troublesome child behaviors they hoped to modify.

Objective measures including the Depression and Anxiety (Welsh) scales of the M.M.P.I.; the Depression and Anxiety scales of the Lorr-Daston Mood Scale; the Present vs. Ideal Rating Scale; the Behavior and Achievement Rating Scale; and the Behavioral Vignettes were administered.

The most strongly significant improvement was seen in the Behavioral Vignette, a measure of how well the parents learned to apply the principles of behavior modification.

Intelligence and group size were not related to outcome suggesting that behavior modification is accessible to individuals of wide ranges of intelligence and possibly for large audiences.

This study focused on the parents and how well they learned what was taught them. It was found that they learned

well and knew how to apply their knowledge to vignette situations. Through subjective evaluations of changes and by daily records of behavior that they kept, these parents appeared to be successful also in changing behavior in their children.

The only other study found, in which parents were trained as a group in behavior modification technique, was done by Russell et al. (1970). This group of parents experienced success in toilet training their retarded children. Reinforcement from other members of the group, therapist, and of course, from the behavior change in their children, was in a large measure responsible.

Homme, Baca and Cottingham (1968) outlined the prerequisites for the "behavioral engineer", be he a psychiatrist or a para-professional. He said the requirement is for a contingency manager and a stimulus controller--both are needed. The contingency manager: 1) reinforces the behaviors he wants; and 2) recognizes and reinforces approximations to this behavior. The stimulus controller arranges stimuli so that it can be responded to and rewarded.

The authors make the sweeping statement that, "We may have sufficient technology here and now to guarantee a superior organism through behavior modification."

Using "natural" contingency managers--teachers and parents--Cantrell et al. (1969) did contingency contracting with these significant others. Professionals prepared the program of contingencies, and the parents and/or teachers

maintained the contingencies spelled out in the contract. Records were sent to the authors who provided feedback on the progress. Very encouraging results followed, but these were limited by the capacity of the professionals and the ability of the adults involved to follow through. "Child Management: A Program for Parents and Teachers" by Smith and Smith (1964) was one of the first programmed learning books written especially for parents and teachers to learn behavior modification. Becker's (1971) "Parents are Teachers" and Patterson and Gullion's (1968) "Living with Children" are more recent entries in the programmed learning approaches especially for parents. "Any parent should be able to change the behavior of his or her children by using the method presented in this book", is the claim made by the latter authors. With the consent of the publishers, sections of Patterson and Gullion's book were used in the training of parents to learn behavior modification to change the self-concept of their children--the methodology of which will be explained in the following chapter.

Measures of Self-Concept

Upon visiting a museum, a large three-dimensional model of the "simple cell" was observed. The complexity of the labyrinth was amazing. If a model could be constructed of the self-concept a striking resemblance would not be surprising.

Wylie (1961) sums up a portion of the problem of measuring self-concept using self-report methods. She says that,

"We would like to assume that a subject's self-report responses are determined by his phenomenal field. However, we know that it would be naive to take this for granted, since it is obvious that such responses may also be influenced by: a) the subject's intent to select what he wished to reveal to the examiner; b) subject's intent to say that he has attitudes or perceptions which he doesn't have; c) subject's response habits, particularly involving introspection and the use of language; and d) a host of situational and methodological factors which may or may not induce variations of a, b, or c but may exert other more superficial influences on the responses obtained" (1961, P.24).

What a person believes about himself is self-concept, but as Combs, Courson and Soper (1963b) point out, what he is willing and able to disclose is something else. However, such well-known researchers as Rogers (1951), Allport (1955, 1966) and Sarbin and Rosenberg (1955) conclude that self-reports are valuable sources of information about the individual, and the individual has the right to be believed when he reports feelings about himself. That self-reports are quick and easy methods of getting information should not be discounted.

Observing behavior is the other possibility of measuring self-concept. Obviously, a highly-trained person in measurement, psychology and personality theory would be desirable, but even then, observer biases almost demand

comparative observations for both validity and reliability. The greater time required and the cost of this method of measurement is an important consideration. For large numbers of subjects the self-report method seems the only practical alternative.

Among the better-known self-report inventories are:

The Bledsoe Self Concept Scale (Bledsoe, 1967)

The California Psychological Inventory, Consulting Psychologists Press Inc., 577 College Avenue, Palo Alto, California

Michigan State General Self Concept of Ability Scale (Brookover, 1962)

The How-I-See-Myself Scale (Gordon, 1966, 1968; Yeatts 1967)

Q-Sort (Cummins 1963)

The Self Appraisal Scale (Davidson and Greenberg, 1967)

The Self-Esteem Inventory (Coopersmith, 1967)

The Semantic Differential (Osgood, Suci and Tannenbaum, 1957)

The Tennessee Self-Concept Scale (Fitts, 1964)

The Michigan State General Self Concept Scale of Ability was selected since it purports to concentrate on a specific area of self-concept, that of ability in school. Reliability of the eight multiple-choice items was originally formed on a Guttman scale with a co-efficient of reproducibility of .95 for males and .96 for females for 1050 seventh-graders

at Oldtown Public School System. This remained stable over a four-year period. Using Hoyt's method of computing internal consistency reliability, the reliabilities of this self-concept scale's total scores were .82 for males and .77 for females.

Cross-validation was done by using the average of two I.Q. scores on the CTMM and the General Self Concept of Ability to predict G.P.A. Predicted G.P.A. was computed for a random sample of 50 males and 50 females and a correlation run between estimated G.P.A. and actual. The resulting correlations were .70 for females and .71 for males. These correlations were compared to the originally determined multiple correlations of self-concept plus I.Q. to predict G.P.A. which were .72 for females and .69 for males.

CHAPTER III

METHODOLOGY

Overview

The procedure for training parents to use behavior modification to enhance the self-concept of ability of their children was as much tactical as it was technical.

The segment of the population of prime concern was the culturally disadvantaged. Having more than their share of children with low achievement, this group provided not only the greatest need factor but also the greatest challenge. Parents of culturally-disadvantaged children often have negative attitudes toward schools because of aversive experiences with school authorities. Their reading skills and self-concepts, too, were expected to be less than average. It was recognized, therefore, that culturally-disadvantaged parents would not be the easiest group to work with, but the effects from a successful outcome might have the greatest societal impact. The note of optimism for this phase of the project came from McCarthy (1967) who found that culturally-disadvantaged parents are concerned about their children and are willing to cooperate with school personnel when a plan is devised that is within the realm of their capabilities.

To launch this program it became necessary to accomplish these important preliminary steps:

1. Identify a cooperative school system.
2. Formulate a research design that could detect any changes in children's self-concept of ability and academic achievement.
3. Devise a parent training program.
4. Select and train a staff to train parents.
5. Identify parents who would participate.

Identifying A Cooperative School System

Within a fifty-mile radius of the University of Massachusetts there are only two large cities where the concentration of culturally-disadvantaged children was sufficient to provide an adequate number at one grade level. Worcester City Schools provided not only an adequate sample of the types of subjects desired but their interest in the study, spirit of cooperation and willingness to support it financially made this setting ideal.

A grant was made available for the project through Title I of the Elementary and Secondary Education Act. This provided funds for the payment of the group leaders, parent reimbursements, video taping and materials. However, it was the help and cooperation of the Worcester City School Administrators, and the principals, counselors and teachers of the four elementary schools involved, that made the study a reality.

The Research Design

One object of this study was to detect changes in children's self-concept of ability and in their academic achievement following treatments given to their parents. It was recognized, however, that there can be acceleration as well as atrophy of effects following treatment and that a Hawthorne effect is a factor of consideration. With these considerations in mind the following experimental design was selected:

Groups

Three groups of students--an experimental, control and placebo--were identified and were tested on three occasions during the school year. The first occurred prior to treatment and the second testing followed treatment. The third test followed three months after treatment to investigate acceleration, maintenance or atrophy of effects.

The experimental group were children whose parents were treated in a series of workshops to learn how to use behavior modification to enhance the self-concept of their children. The placebo group comprised children whose parents received articles in the mail concerning parent-child-school problems. The control group or their parents had no specific treatment.

Variables

The dependent variables of the study were:

Grade point averages

Letter grades in the four subjects of English, arithmetic, social studies and science were converted to a 4.0 scale for the grading periods ending in November, February and April and then combined into one grade-point average for each grading period. Although teachers' grades are possibly not as reliable and valid as we would like them, nevertheless, they do form one of the major criteria for evaluation of children's school achievement and are important to this study because most parents and children accept teachers' grades as the chief measure of their ability in school.

Self-concept of ability

The Michigan State General Self Concept of Ability Scale was used to measure that segment of self-concept dealing with school ability. This scale has been used with thousands of youngsters and has high reliability coefficients and validity. Although used extensively in only one geographical area, it appears to be the best scale available that purports to measure self-concept of ability. A sample of the scale can be seen in Appendix G.

Standard achievement scores

The full battery of the Stanford Achievement Test Form W was administered in November (pre-treatment) as part of the regular testing program of the school system.

Since the full battery requires three days of testing, it was decided to post-test in April only and to administer just three sub-tests: word meaning, paragraph meaning and arithmetic computation. These three sections were chosen because they are representative of important areas of learning for this age group and required only a single morning to administer. The Stanford Achievement Test has been published for 48 years and has correlations of reliability of the sub-tests that range from .77 to .95. The test was designed for primary and intermediate children and its validation stresses content of existing school curriculum.

Attendance

The number of days absent were recorded for each student for each grading period. A comparison of attendance records was deemed important to determine if self-concept enhancement has any effect on school attendance.

I.Q.

The Otis-Lennon Test of Mental Ability Form K was administered in November as part of the regular sixth-grade testing program. Results of this were used primarily to check on the equivalence of the three student groups.

Schedule for collection of data

The schedule of test administration and/or collection of data for students in the experimental, control

and placebo groups was as follows:

	1970	1971	1971
GRADE POINT AVERAGES	November	February	April
ABSENCES	November	February	April
SELF-CONCEPT SCALE	November	February	April
STANFORD ACHIEVEMENT	November		April
OTIS-LENNON	November		

It should be noted that except for the last testing that included the second administration of the Stanford Achievement Test, all the children in each class setting were administered the self-concept scale even if they were not involved in any group in the study. This was done to reduce disruption of classes and to avoid identifying those students who were being studied.

Devising the Experimental Parent Training Program

The objectives of the program as stated to the parents were:

To help our children do better in school and in their daily life:

1. By recognizing that our child has a SELF-IMAGE (as do we adults).
2. By realizing that how well our child does at any given task depends upon his self-image.
3. By knowing that a child's self-image is formed by the way parents, teachers and the child's friends respond to his actions. BUT, PARENTS HAVE THE GREATEST INFLUENCE OF ALL ON A CHILD'S SELF-IMAGE.
4. By learning how we, as parents, can change and improve the self-image of our child and thereby release him from the box of a low self-image.

A series of nine workshops were planned to fulfil these goals. Each session was designed for 1 1/2 hours beginning at 7:00 p.m., but a refreshment time following each meeting allowed for an open-ended atmosphere.

Developing an understanding of self-concept and its importance was considered to be the first priority and this theme was repeated at some time during each workshop. One specific lecture, several transparency presentations and parent discussions were the methods used to achieve this aim.

Behavior modification was to be the vehicle for enhancing self-concept, therefore, introduction to the principles and techniques and the practical use thereof was initiated early. At the first session each parent was given the

assignment to choose a current behavior exhibited by his child that was detrimental to the child's progress or relationships at home or at school. They were to observe and chart this one behavior for one week. This exercise was designed for the parents to learn to observe the behavior of their children. But it also provided an immediate success experience for many parents, as the charting alone caused a change in behavior. Wrist counters, charts to daily record results, and masking tape to attach the chart to their refrigerators (where it would act as a frequent reminder) were all provided and given to the parents at the first meeting.

Parents who completed their assignment and turned in a completed chart at the next session were reinforced with a fresh rose-bud. Other rewards were given to the parents on an intermittent schedule as they completed certain tasks. However, the reinforcement received by observing the changes that most parents were achieving in themselves and their children was undoubtedly more significant.

Subsequent meetings were planned to take the parents through the sequence of: 1) pinpointing specific positive behaviors that would have the effect of enhancing self-concept of ability in their children, 2) learning the importance and technique of counting and charting behaviors, 3) understanding reinforcement and how to use it; and 4) evaluating results.

After the initial assignment that focused on a negative

behavior for the purpose of learning some observation and charting techniques and to register a quick success experience, all attention thereafter was directed toward positive behaviors of both parents and their children that would enhance self-concept.

Because of Thanksgiving and Christmas holidays the meeting dates were November 5, 12 and 19, and December 3, 10 and 17, and January 7, 14 and 27.

The parents from Belmont School area met at the Community Hall of the Lady of Fatima Church which offered a more pleasant meeting environment and more adequate parking facilities than the Belmont School. The facility was generously offered with no charge by the Pastor.

The parents from Grafton, Chandler and Lamartine Street Schools met at Lamartine Street School where a large well-lighted and cheerful room was available. Since sessions were to be video-taped for future use as a training media, lighting and size of room were important considerations.

Group leaders

Two facilitators were teamed to lead the Lamartine parent group while one person conducted the Belmont parent group. This was done to find out if team leaders would produce better results than a single leader approach. This plan was abandoned after the third meeting as the distribution of parents was ten at Lamartine and eighteen at Belmont. Beginning with the

fourth meeting, therefore, the groups were combined and met at Lamartine School thereafter.

Methods of instruction included the use of programmed learning materials on transparencies. With the publisher's permission sections of Patterson and Gullion's (1968) book "Living with Children" was used on the transparencies. Since some parents' proficiency in reading was minimal, group reading and group answering of needed words in the programmed learning sequences was practiced. Role-playing, group discussions, and other audio-visual methods were used but lectures were kept to a bare minimum. Evaluation sessions were held with the staff following each session. See Appendix B for details and a format of each session.

Two graduate students from the University of Massachusetts assisted the facilitators. One of the students who was interested in learning more about behavior modification volunteered her services as small group leader and participated in role-playing situations. The other, a male student, was skilled in role-playing techniques and acted as facilitator during parts of two sessions. An aide, a parent from the community, was also hired to assist with refreshments and routine paper work for each meeting.

Devising the Placebo Parent Program

To negate the Hawthorne effect that some experimental

groups experience, a placebo group was formed. They received a completely different type of treatment. The parents who indicated a desire to attend the workshops but did not attend the first meeting were sent a letter asking them to "participate in a study that will help us help our children." They were first asked to complete a questionnaire that was the Michigan State Perception of Children's Self-Concept Scale, constructed by Brookover (1962).

A series of six articles taken from Parent's Magazine was then sent on a weekly basis to this placebo group. At the end of six weeks a letter requested the completion of a short evaluation of the articles they received and a follow-up Michigan State Scale identical to the first one. Self-addressed, stamped envelopes were supplied in each request. See Appendix C, D, E and F for samples of the letters (C), Scales (D), Bibliography of articles (E) and evaluation forms that were sent (F).

Selecting and Training Staff to Train Parents

In the Spring of 1970 the author organized and assisted in the training of a group of teachers, counselors and principals from Worcester City Schools in behavior modification. From this group two outstanding candidates were selected: one a female third-grade teacher, beginning her second year as a teacher; the other, an experienced male adjustment counselor. The third person selected, was a special education teacher who had used behavior modification

in his class previously and was currently taking a course in reinforcement theory. Since the three selected for group leaders were fairly well-grounded in the theory and principles but were oriented solely toward working with children, four two-hour sessions were conducted to familiarize them with the format and the techniques to be used in working with parents. These meetings consisted of planning, reviewing and revising the programs for each session, creating materials and discussing strategies for handling the material to be presented. Sessions were held on October 22 and 29, prior to the first parent workshop and again on November 12 and December 10, 1970.

Analysis of Data--Parents Groups

The parents of both the experimental and placebo groups were administered the Michigan State Perception of Children Scale (general and specific forms) before and after treatment. A t-test was used to compare the pre and post scores of the experimental parent group.

The change in the pre and post scores of the placebo parent group was not calculated because of the small sample size. However, a t-test was calculated for the pretest scores of the experimental and placebo parent groups to investigate the equivalence of the two parent groups.

Analysis of Data--Student Groups

The analysis of self-concept scores, grade point averages,

standardized achievement tests and attendance in the three groups--experimental, control and placebo--was done using an analysis of covariance. For each variable under investigation the covariate was the pretest score. This was done to control for any differences in the groups prior to treatment. A computer program devised by Harvey (1960) was used to do this analysis.

Further testing was done by sex or selected variables when the means, by sex, indicated unusual variances (Runyon and Huber, 1967).

Identifying Parents Who Would Participate

The population

Eight sixth-grade classes with a total of 194 children were selected from four elementary schools in areas that were classified by the school system as target areas for culturally-disadvantaged children. From these classes 98 children who had achieved below the mean grade-point average for both semesters of the fifth grade were identified as potential participants. The basis for the grade-point average were the four subjects of English, mathematics, social studies and science--each given equal weight.

All parents of these potential participants were sent a letter inviting them to join "an exciting new project . . . that will pinpoint things that parents can do to make their children try harder in school" and

"to help you learn about these new ways that parents are using to help their children." Mention was made that money for travel and baby-sitting would be provided but no amounts were mentioned. A copy of the letter is shown in Appendix A-1.

A sign-up slip with a self-addressed and stamped envelope was enclosed and the parent was urged to reply within one week. A copy of this is also shown in Appendix A-2.

Two days after the deadline fourteen replies had been received. Therefore, telephone solicitations were made by the school secretary or the counselor in each elementary school to all parents who did not reply. An additional thirty-nine parents responded affirmatively to join the program. All were asked to attend the first meetings to be held November 5, 1970 at one of two locations most convenient to the areas in which they lived.

Twenty-eight parents actually attended the first meetings and they became the experimental parent group and their children became the experimental subjects.

A follow-up was made of the parents who had agreed to join the program but did not turn up at the first meeting. A random sample of six parents were called on the telephone and asked why they did not attend the meeting. All expressed a desire to come but could not due to such reasons as "sickness in the family",

"husbands bowling night", "unexpected visitor", and "other parent with whom she was going to the meeting couldn't go". From this survey it was decided that both groups had the desire to attend and to help their children, but for good reasons some parents' plans to attend that particular meeting were aborted. There appeared to be a homogeniety in the two groups sufficient to state that they were from the same population.

The beginning experimental parent group consisted of six men and twenty-two women, most of whom were in the 30 to 40 year age range. Five of the fathers attended with their wives but one came alone.

Four parents, all women, were from minority ethnic backgrounds and one did not speak English. An interpreter was found for her but this mother did not return after the first meeting.

The fathers' presence was very much desired. Therefore, the transportation and baby-sitting allowance of $2.50 per meeting was paid on a per person basis, making it possible for a husband and wife each to be paid. The fact that several fathers worked nights, nine homes had no father and at least three husbands were described as alcoholics, made it difficult to get better male representation.

As another inducement for regular attendance, a fifty cent per meeting bonus was offered to those who

attended all the meetings.

C H A P T E R I V

RESULTS

Changes in children's self-concept of ability and academic achievement after treatment of their parents were investigated in this study. Parents learned principles and techniques of behavior modification to specifically enhance their children's self-concept of ability and academic achievement.

The results will be presented in three parts. The first will relate to objective testing of the parent program, the second part to the measured changes in the three children's groups and the third part a descriptive evaluation made by the experimental parent group.

Parent program

The first of nine parent workshop sessions began on November 5, 1970, with twenty-eight parents in two groups. Ten persons, one father and nine mothers, comprised the Lamartine group. The Belmont group had five fathers and thirteen mothers.

Three parents attended only the first meeting and one each dropped after the second and third meeting. See Table 1. The remaining twenty-three, however, averaged 83% attendance with twelve of the twenty-three or 52% participating in all

of the sessions and thereby each earning the cash bonus of $4.50.

TABLE 1

EXPERIMENTAL PARENT WORKSHOP ENROLLMENT

GROUP	BEGAN PROGRAM			FINISHED PROGRAM		
	Mothers	Fathers	Total	Mothers	Fathers	Total
Lamartine	9	1	10	6	0	6
Belmont	13	5	18	12	5	17
COMBINED	22	6	28	18	5	23

Three of the parents who were regular attendees did not have children in the original population. They had heard of the program by word of mouth and were allowed to participate without prejudice. One had a child in a special class for the emotionally disturbed, while the other parents' children were good achievers but had other behavior problems that they wished to change. The children of these three parents did not become subjects in the experimental group, and no data from these parents were included in the analysis.

After the third meeting it was decided to combine the two groups because of the disproportionate numbers of parents in each group and for better utilization of leaders.

Hypothesis 1

There will be a statistically significant difference in parents' perception of their children as measured by the Michigan State Parental Perception Scale between parents who have taken part in a nine-session behavior modification workshop series (parent experimental group) and parents who have received only written material about child-parent-school relationships (parent placebo group).

TABLE 2

COMPARISON OF THE EXPERIMENTAL PARENT GROUP PRE- AND POST-TREATMENT MEANS ON THE PARENTAL PERCEPTION OF SELF-CONCEPT OF THEIR CHILDREN SCALE FOR NOVEMBER AND JANUARY

Variable	Pre-Treatment November N=21		Post-Treatment January N=21		t
	Mean(a)	S.D.	Mean(a)	S.D.	
Parental Perception	123.14	17.84	133.57	22.86	2.908**

(a) Means are combined General and Specific Subject forms of this scale.

** Significant at the .01 level.

Using a t-test it was found that there was a significant difference at the .01 significance level in the experimental parent groups' perception of their children's

self-concept before and after treatment and the change was in the positive direction from 123.14 to 133.57 as shown in Table 2. This difference is evidence that the treatment given to the experimental parent group did produce the desired change, that of having parents perceive their children with more positive self-concepts.

A comparison of the pre-treatment scores of parents in the experimental and placebo groups shows no statistically significant difference. See Table 3.

TABLE 3

COMPARISON OF EXPERIMENTAL AND PLACEBO PARENTS ON NOVEMBER PRE-TREATMENT SCORES OF THE MICHIGAN STATE PARENTAL PERCEPTION OF THEIR CHILDREN SCALE

Variable	Experimental N=21		Placebo N=14		t
	Mean	S.D.	Mean	S.D.	
Parental Perception	123.14	18.38	120.5	16.82	.454

This result helps to verify the homogeneity of the two parent groups. The original assumption was that the experimental and placebo parent groups were from the same population.

Complete mailings were made to twenty-five placebo parents. Fourteen responded by filling out the first

Michigan State Parental Perception of their Children Scale, but only after many mail and telephone follow-ups. The post Michigan State Scale was returned by only four parents. Despite one mail follow-up, no additional scales were returned. Further attempts to collect scales were reluctantly abandoned. Therefore, no test was made to compare the experimental and placebo parent groups and the first hypothesis could not be tested.

The objective testing of the parent groups showed a significant change in the experimental group, that of a perception of more positive self-concepts in their children after treatment. Also, the homogeneity of the experimental and placebo groups at the beginning of treatment was confirmed. Comparisons of the two parent groups after treatment was not possible due to poor response by the placebo parents.

Measured changes in children's behavior

Hypothesis 2

There will be a statistically significant difference in self-concept of ability as measured by the Michigan State Self Concept of Ability Scale (General) between children of parents who have taken a nine-session behavior modification workshop series (experimental group) and children of parents who have received only written material about parent-child-school relationships (placebo group).

TABLE 4

MEANS AND STANDARD DEVIATIONS FOR SELF CONCEPT OF ABILITY SCALE FOR EXPERIMENTAL, CONTROL AND PLACEBO GROUPS FOR EACH TESTING PERIOD

Group	November	February(a)	April(a)
Experimental			
Mean	24.5	26.4	28.5
S.D.	5.2	4.0	6.9
Control			
Mean	27.2	27.6	27.5
S.D.	3.8	3.9	3.4
Placebo			
Mean	25.5	27.3	28.9
S.D.	4.8	3.1	3.2

(a) These means are adjusted by covaring the November means.

The Michigan State (General) Self Concept Scale was administered in November, February and April to the student experimental, control and placebo groups. An analysis of covariance was performed on the February and April scores, using Harvey's (1960) computer program which allows for repeated measures and unequal numbers in the groups.

In order to control for any differences in the groups

on the pretest measures, the analysis of covariance was done on the February and April scores using the November scores as a covariate.

TABLE 5

ANALYSIS OF COVARIANCE OF SELF CONCEPT OF ABILITY (GENERAL) FOR THE EXPERIMENTAL, CONTROL AND PLACEBO GROUPS FOR FEBRUARY AND APRIL USING NOVEMBER SCORES AS A COVARIATE

SOURCE	df	Mean Square	F
Total	101		
Total Reduction	7	7186.21	
Population Mean - Sample Mean	1	49857.78	
Groups	2	3.82	.259
Tests	1	38.64	2.620
Group x Test	2	11.99	0.813
Nov. Co-V.	1	383.36	
Remainder	94	14.75	

As Table 5 indicates there was no significant difference between groups, or interaction between groups and tests, an F ratio of 3.10 being needed for .05 significance with 2 and 94 degrees of freedom. However, there was an interesting trend in the data which can be seen from an analysis of Tables 6 and 7.

TABLE 6

COMPARISON OF MEANS OF SELF-CONCEPT SCORES FOR EACH GROUP AT EACH TESTING TIME

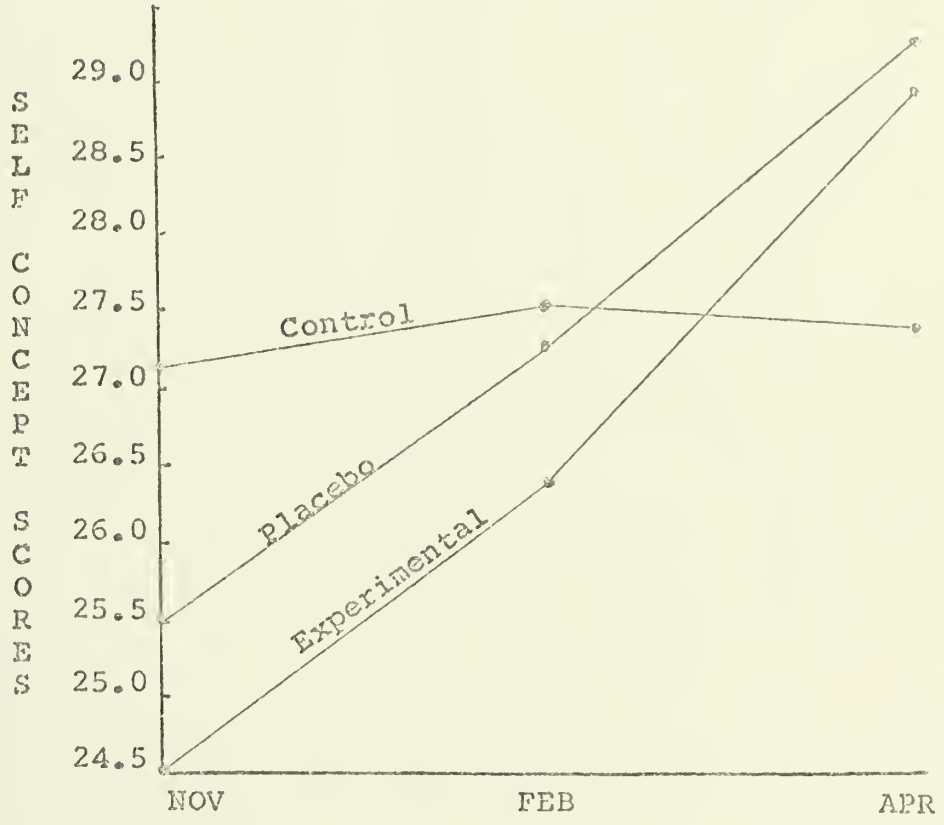
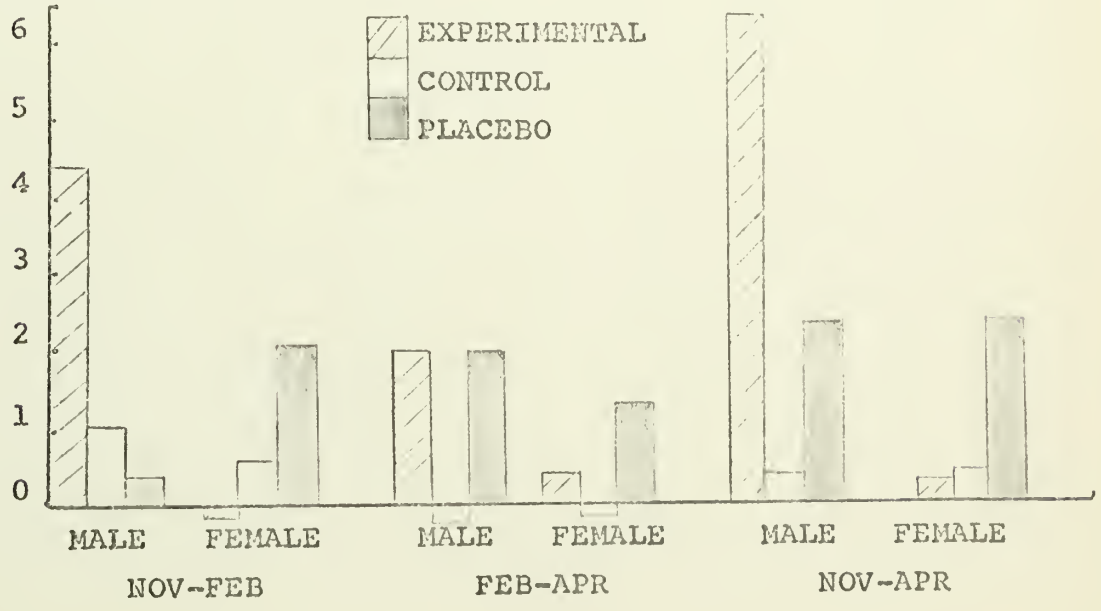


TABLE 7

MEAN GAINS OF SELF-CONCEPT FOR EACH PERIOD BY SEX



Both the Experimental and Placebo groups had gains in self-concept means over the six-month period, with the experimental group showing a slight acceleration in the post-treatment period. The control group, by comparison, gained slightly in the first three months, then lost slightly in the last three months, as can be seen in Table 6.

As shown in Table 7, male children in the experimental group averaged more than four times larger gains than male children in the other two groups during the November-February treatment period which is statistically significant at the .05 level using a correlated t-test. It should be noted that the male experimental group also had the lowest initial self-concept mean, 21.6, which could account for a normal regression towards the mean.

Although there was an increase in the mean of the self-concept scores of the experimental group and there was acceleration in the mean following treatment, the change was not statistically significant. The experimental group's males exhibited a marked gain, but, since their initial mean was low, the regression to mean would make this change questionable. Therefore, hypothesis 2 cannot be accepted.

Hypothesis 3

There will be a statistically significant difference in achievement as measured by selected sub-tests of the Stanford Achievement Test between children of parents who have taken part in a nine-session behavior modification workshop series (experimental group) and children of parents who have received only written material about parent-child-school relationships (placebo group).

TABLE 8

MEANS AND MEAN GAINS FOR EXPERIMENTAL, CONTROL & PLACEBO GROUPS FOR SUM OF 3 SUBTESTS OF STANFORD ACHIEVEMENT TEST BY GROUPS FOR NOVEMBER AND APRIL

Groups	S.A.T. Nov.		S.A.T. Apr.		Mean Gain
	Mean	S.D.	Mean	S.D.	
Experimental N=21	48.1	12.4	57.8	16.1	9.7
Control N=20	51.0	10.3	52.8	14.9	1.8
Placebo N=21	48.9	11.9	46.2	16.8	-2.7

A two-factor analysis of covariance with repeated measures on one of the factors and a single covariate was performed using a Harvey (1960) computer program.

The sum of three subtest scores--word meaning, paragraph meaning and arithmetic computation of the Stanford Achievement Test--was used. Although each subtest was not analyzed separately, the arithmetic computation contributed more to the significant difference than the other two subtests. The November scores were covaried to correct for any differences, on that variable, between groups.

TABLE 9

ANALYSIS OF COVARIANCE OF STANFORD ACHIEVEMENT TESTS FOR EXPERIMENTAL, CONTROL AND PLACEBO GROUPS, NOVEMBER AND APRIL TESTING

SOURCE	df	Mean Squares	F
Total	63	-	
Total Reduction	4	1009.14	
MU-XM	1	324.59	1.721
Groups	2	713.92	3.784*
November CoV	1	2293.18	
Remainder	59	188.65	

* Significant at .05 level.

An F-ratio of 3.784 was obtained which at (2, 59) degrees of freedom is significant at the .05 level as shown in Table 9. Since the November scores are being covaried this difference between groups is for April

scores. A Duncan's New Multiple Range Analysis was performed that compared each group's April scores and a difference between the experimental and the placebo group was found, significant at the .05 level. The experimental group therefore gained significantly in standardized achievement tests compared to the placebo group, as hypothesized.

Differences in achievement by sex as measured by the sum of selected subtests of the Stanford Achievement Test were noted in each group as shown in Table 10 and graphed in Table 12. Females in the experimental group averaged

TABLE 10

NOVEMBER MEANS AND MEAN GAINS OF S.A.T. TESTS BY SEX FOR EACH GROUP

	November Means		Mean Gains (Nov.-Apr.)		Group
	Male	Female	Male	Female	
Experimental	50.0	47.1	4.6	12.1	9.7
	N=7	N=13			
Control	51.5	50.8	1.9	1.7	1.8
	N=10	N=10			
Placebo	51.7	46.0	-4.0	-1.3	-2.7
	N=10	N=10			

a 12.1 point gain over the six-month period while males in this group gained 4.6. This compares to a gain of 1.9 and 1.7 respectively in the control group and a loss of -4.0 and -1.3 in the placebo group. Although the November mean scores for experimental group females was low, 47.1, this does not seem to account for this large gain as placebo females' November mean was 46.0 and this group lost an average of 1.3.

TABLE 11

MEAN SCORES ON S.A.T. FOR EACH GROUP AT EACH TESTING TIME

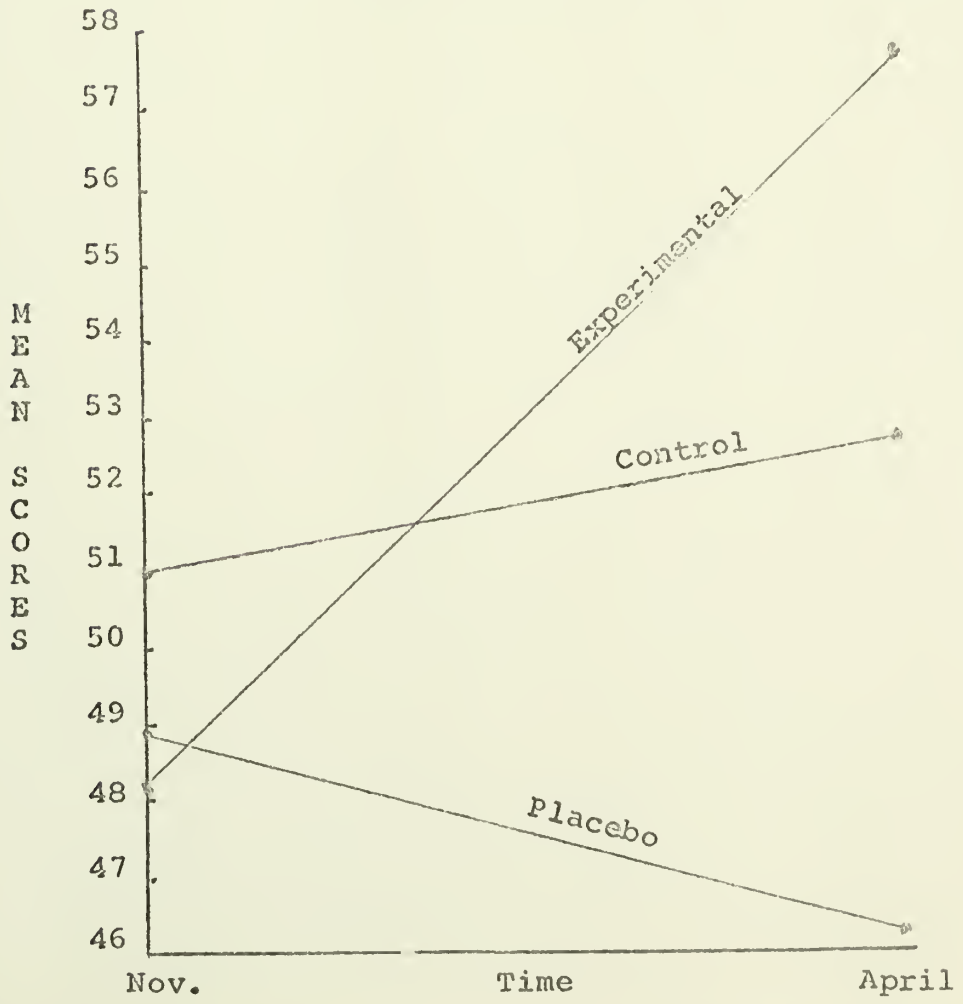


TABLE 12

MEAN GAINS ON S.A.T. FOR EACH GROUP
BY SEX: NOV-APR

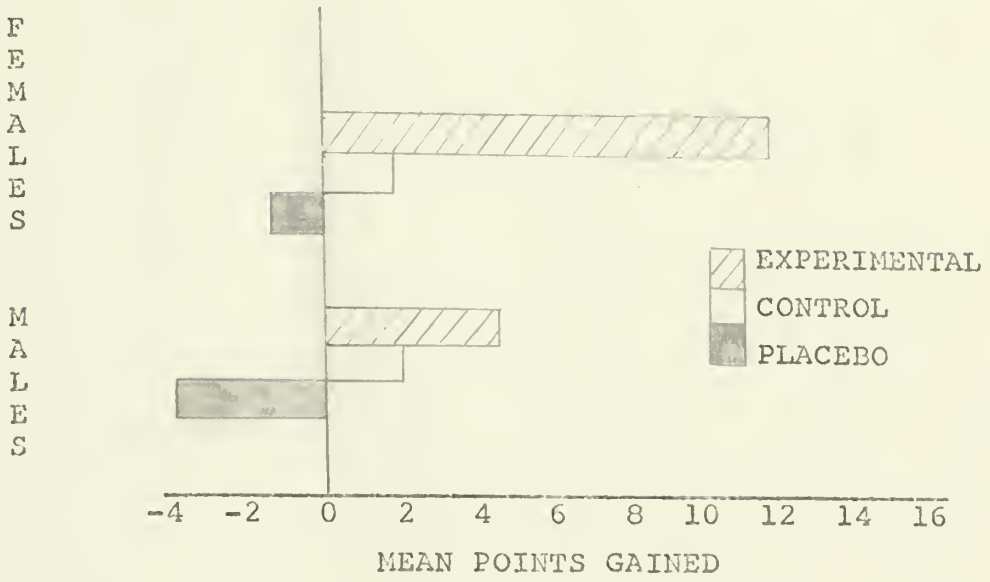


Table 11 shows the trends of the three groups. The experimental group's gain is obviously greater than the other two groups', but the decline in mean scores for the placebo group is puzzling and cannot be accounted for--suggesting further study is needed. However, from the trends that have been shown, hypothesis 3 cannot be rejected.

Hypothesis 4

There will be a statistically significant difference in grade point average between children of parents who have taken part in a nine-session behavior modification

workshop series (experimental group) and children of parents who have received only written material about parent-child-school relationships (placebo group).

TABLE 13

MEANS AND STANDARD DEVIATIONS FOR GRADE POINT AVERAGES OF EXPERIMENTAL, CONTROL AND PLACEBO GROUPS FOR NOVEMBER, FEBRUARY AND APRIL GRADING PERIODS

Groups		Nov.(a)	Feb.(a)	Apr.
Experimental	Mean	1.68	1.99	2.23
	S.D.	.5	.4	.4
Control	Mean	1.70	1.91	2.22
	S.D.	.5	.6	.6
Placebo	Mean	1.65	1.93	2.22
	S.D.	.7	.6	.5

(a) November and February means are adjusted to account for a variance in grading caused by some students having teacher corps in November and others in February.

After the study was underway a disturbing condition was revealed. Two of four sixth grade classes in one school being studied had teacher corps teachers for the first grading period (September-November). The teacher corps teachers then switched classes with two regular teachers for the second grading period (November-

February). The third grading period (February-April) found teacher corps and regular teachers team-teaching.

An analysis of grades showed that the teacher corps teachers awarded grades an average of .98 higher (on a 4.0 scale) than regular teachers for the first grading period and .30 higher for the second grading period. Adjustments in individual grade point averages and in group means were made accordingly.

An analysis of covariance for the three groups over the three grading periods was calculated, again covaring the November grades to adjust for any difference in grades among the groups at the start of the program.

TABLE 14

ANALYSIS OF COVARIANCE FOR GRADE POINT AVERAGE OF EXPERIMENTAL, CONTROL AND PLACEBO GROUPS FOR NOVEMBER, FEBRUARY AND APRIL GRADING PERIODS

Source	df	Mean Square	F
Total	125		
Total Reduction	7	40961.57	
MU-XM	1	286609.07	
Groups	2	0.18	0.865
Grades	1	3.29	16.138**
Group x Grades	2	0.02	0.112
Nov. Covariate	1	12.12	59.412
Remainder	118	0.20	-

** Significant at the .01 level.

As shown in Table 13 there was a significant change in grade point averages at the .01 level over the three grading periods. However, the interaction between groups and grades was not significant. Therefore, no further analysis was made and the hypothesis 4 cannot be accepted.

Hypothesis 5

There will be a statistically significant difference in attendance rate between children of parents who have taken part in a nine-session behavior modification workshop series (experimental group) and children of parents who received only written material about parent-child-school relationships (placebo group).

TABLE 15

MEANS AND STANDARD DEVIATIONS FOR ATTENDANCE RATES (DAYS ABSENT PER PERIOD) FOR EACH GRADING PERIOD FOR EACH GROUP

Group		November	February	April
Experimental	Mean	1.8	3.0	5.6
	S.D.	(2.1)	(3.3)	(2.7)
Control	Mean	3.3	3.9	6.2
	S.D.	(2.8)	(3.3)	(4.4)
Placebo	Mean	1.5	3.6	5.3
	S.D.	(2.0)	(3.1)	(3.4)

TABLE 16

ANALYSIS OF VARIANCE OF ATTENDANCE FOR EACH GROUP FOR GRADING PERIODS ENDING IN NOVEMBER, FEBRUARY AND APRIL

Source	df	Mean Square	F
Mean	1	2769.59	
Groups	2	22.92	0.85
Attendance Periods	2	201.30	28.9**
Subjects (Groups)	60	26.84	
Groups x Periods	4	3.85	0.56
Subjects x Periods (Group)	120	6.96	

** Significant at .01 level.

An analysis of variance was calculated using a standard BMD08V computer program (Dixon, 1970). It was found that there was an increase in absence rate by period and that this increase was significant at the .01 level. However, there was not a significant difference in the increase by group or in the interaction between groups and absence periods. Therefore, no further analysis was attempted and the hypothesis 5 cannot be accepted.

Evaluation of the parent workshops

Part of the eighth session of the experimental parent

workshop was devoted to an evaluation of the program by the parents. This was a verbal response by each parent to the questions: 1) What has the program meant to them personally?

2) What has the program meant to their child?

3) How has the program affected their family?

The responses were video-taped and some of the responses are quoted as follows:

"I was always too busy . . . to give her the necessary reinforcement--I recognize these things now as positive reinforcers."

"It has brought me closer not only to this child but to the other three."

"She has worked with me more closely than she has ever worked with her father before."

"It's a lot easier to keep peace in the family with this positive reinforcement."

"I do think it's a marvelous thing; I think if more people tried it everybody would be a lot happier."

"It did more for me than for the kids. It helped the kids but it gave me a better understanding of my children. It helped me, instead of yelling, I stop to think. . . ."

"I'm not so apt to holler at the least little thing that comes up. I try to overlook a lot more, rather than jump at the first thing that happens."

"It has brought the whole family together."

"I think we should meet once a month anyway for an hour and a half or two."

"Usually, all you're doing constantly is picking up all the bad things this kid does and you're jumping down his throat 24 hours of the day. To say gee that was nice--you know I tried it with Kathy--Kathy looked at me like I was some kind of a nut, course she didn't know what was going on. And the more I did it the looks started fading away and she started looking forward to it."

"My daughter, she needs a lot of encouraging, which I thought I was doing but since coming here, I've noticed I've done a lot more and this has helped her."

"I have a lot more patience with them. . . ."

"And I never listened--with half an ear, yeah, but I listen to him now--I don't think I've yelled at him in over a week. I hope the meetings keep up even if only once a month."

"The course itself helped me tremendously in just recognizing the fact that my child had a problem in an area of school work. And basically the problem was not here alone but partly mine too because I wasn't taking enough interest in his school work and so forth. This course has helped me to find areas in which I can help him more and bring out in him more."

"Two weeks ago my daughter--this sounds foolish for a sixth grader--read the first book on her own that wasn't required reading."

"I do think the whole family is benefiting. I think the attitude is changing right through the house. And it's a lot easier to keep it on an even plane with this idea in the back of your mind. Before I didn't think about it that much. But with the program emphasizing it, it changes your attitude and the children begin to change theirs."

CHAPTER V

SUMMARY

Discussion

The primary purpose of this study was to investigate the viability of parents' use of behavior modification to enhance their children's self-concept of ability and academic achievement. Abundant evidence seems to indicate that a low or negative self-concept is a deterrent to achievement in any area of endeavor, but little is known about effective ways to enhance self-concept.

Since children from culturally-disadvantaged areas have substantially more low and failing grades in school than would be predicted from indices of intelligence, a sample of this segment of the population was selected and studied.

Eight sixth-grade classes were chosen with a total of 194 children from four elementary schools. These were in areas classified by the Worcester (Mass.) City Schools as "target areas" for culturally-disadvantaged children.

Parents of students who were below the mean in grade-point average were invited to participate in a series of nine 1 1/2 hour behavior modification workshops over a three-month period. Twenty-three parents completed the treatment--learning about self-concept, the importance of parents in the formation and changing of self-concept, and the

principles and techniques of using behavior modification to enhance self-concept. The children of these parents were described as the experimental student group.

Another comparable group of parents who agreed to join the program, but did not attend the first meeting, became the placebo group. This would compensate for the Hawthorne effect. "Placebo" treatment was a series of six mailings concerning parent-child-school relations. The children of these parents were described as the student placebo group.

A third group of students, randomly selected from the remaining children whose grade-point average was below the mean, were described as the control group.

At three times throughout the 1970-71 school year (November, February and April), tests were administered and/or data collected on attendance, standardized achievement tests, teachers' grades and a self-concept scale. The first time interval represented pre-treatment; the second, post-treatment; the last, a delayed post-treatment.

A two-factor analysis of covariance was used, primarily, with repeated measures on one of the factors, and a single covariate. The pre-treatment data was used as the covariate in order to control for any differences in the groups on the pre-treatment measure. For other comparisons of changes within groups t-tests were used.

Five hypotheses were tested to study parents' use of behavior modification to enhance their children's self-concept of ability and academic achievement:

Hypothesis 1. There will be a statistically significant difference in parents' perception of their children, as measured by the Michigan State Parental Perception of Children Scale, between parents who have taken part in a nine-session behavior modification workshop series (parent experimental group) and parents who have received only written material about child-parent-school relationships (parent placebo group).

No test of this hypothesis was possible because an insufficient number of post-treatment scales were returned by the placebo group parents. However, the increase in the mean scores of the experimental parent group after treatment was significant at the .01 level. Ignoring the Hawthorne effect, this result would indicate that parents, after learning behavior modification principles and techniques, were able to perceive their children's ability more positively.

A t-test of the pre-treatment scores of the experimental and placebo parent groups showed no statistical difference between the two groups, supporting the premise that the two parent groups had homogeniety initially. Although a statistical comparison of the two parent groups following treatment could not be made, on personal observations of the treatment leaders and the experimenter, there appeared to be a positive change in the perception of their children by the experimental parent group. This conclusion was reinforced by a video tape that was made of the workshop

series, including one evaluation period by parents during the eighth workshop session. The overwhelmingly positive responses made by those parents in the treatment group, some of which were reported in Chapter III, give an indication of the types of changes that the parents experienced. Specifically, the parents recognized: 1) that reinforcing their children gets better results than yelling and punishing, 2) that taking the time to observe and concentrate on positive qualities in their children's behavior brought their relationship closer together and made the parent more patient, and 3) with more patience and a positive attitude "peace in the family" became more frequent and the children seemed to do better in school.

Hypothesis 2. There will be a statistically significant difference in self-concept of ability as measured by the Michigan State Self Concept of Ability Scale (General), between children of parents who have taken part in a nine-session behavior modification workshop series (experimental group) and children of parents who have received only written material about parent-child-school relationships (placebo group).

In testing this hypothesis, no significant difference was found in the groups, or in the interaction between groups and tests, for this variable. The self-concept of ability means for both the experimental and placebo groups, however, were enhanced by the treatment of the parents, compared to practically no gain by the control group.

The gain in self-concept of ability experienced by males in the experimental group during the treatment was highly significant. It is uncertain, however, if all of this gain was due to the treatment or to regression to the mean, since the male experimental group's pre-treatment mean was lower than the other groups. Nevertheless, hypothesis 2 cannot be accepted.

Hypothesis 3. There will be a statistically significant difference in achievement, as measured by selected sub-tests of the Stanford Achievement Test, between children of parents who have taken part in a nine-session behavior modification workshop series (experimental group) and children of parents who have received only written material about parent-child-school relationships (placebo group).

In testing this hypothesis, a difference was found between the experimental and placebo groups, significant at the .05 level. The experimental group experienced a 20% mean gain on the three sub-tests of the Stanford Achievement Test compared to a 5.5% decline for the placebo group, and a 3.5% gain for the control group.

The importance of the outcome of this analysis is emphasized by the fact that standardized achievement tests are considerably more reliable a measure of achievement than teachers' grades.

Further investigation of the data by sex revealed that females in the experimental group had a mean gain on Stanford

Achievement Tests of almost three times that of the males in the group, while such differences did not exist in the other groups.

This significant gain for females is especially interesting as it is about this time in school that Shaw and McCuen (1960) found that underachievement begins in girls. Large amounts of reinforcement for girls at this sixth-grade level could possibly rehabilitate those girls who have started such a trend, and stem the tide for potential underachievers.

Hypothesis 4. There will be a statistically significant difference in the grade-point average in the subjects of English, mathematics, social studies and science between children of parents who have taken part in a nine-session behavior modification workshop series (experimental group) and children of parents who have received only written material about parent-child-school relationships (placebo group).

There was a significant difference in grade-point averages for all groups between the pre- and post-treatment periods, with all groups increasing in grade-point average. However, no significant differences were found between groups, or the interaction between the groups and grading periods. Therefore, this hypothesis cannot be accepted.

Hypothesis 5. There will be a statistically significant difference in attendance rate between children of parents who have taken part in a nine-session behavior

modification workshop series (experimental group) and children of parents who have received only written material about parent-child-school relationships (placebo group).

Although there was a significant change in number of days absent in each time period for all groups, there was no significant difference between the groups or in the interaction between groups and attendance periods. This hypothesis cannot be accepted.

Conclusions

According to the literature of this research, there are no studies which have attempted to teach groups of parents, from culturally-disadvantaged areas, behavior modification principles and techniques, and to test the efficacy of such training through student self-concept scales and other educational variables.

There is evidence to draw three specific conclusions from the analysis of data and the evaluations made by parents:

1. Parents from a culturally-disadvantaged area appeared to have a significantly higher perception of their children's ability after learning and using behavior modification principles and techniques.
2. Although further study is suggested, results indicate that childrens' achievement, as measured by selected subtests of the Stanford Achievement

Test, was significantly enhanced by their parents' use of behavior modification.

3. Females' gain in achievement following parental treatment was significantly greater than males in the experimental group.

Aside from the statistical analysis of data, an example of other observations that could not be measured quantitatively seems important and compelling to report:

One woman with five children said that, before learning how to look for positive qualities in her sixth-grader, she had "never liked that kid, and he didn't like me". After learning how to observe her child and how to reinforce him she told a small group of parents that for the first time in twelve years "I really like him" and "before leaving for the meeting tonight he asked me, 'Aren't you going to kiss me before you go?'".

The two basic needs of all human beings, that Glasser (1965) speaks of: to love and be loved, and to feel worthwhile to oneself and to others, found fulfillment for many of the parents when they learned to look for "the mine rich in gems" in their child, and when they learned how to reinforce positive behaviors.

Significance of the Study

Perhaps the most significant outcome of this study was the confirmation that culturally-disadvantaged parents can,

and are willing to, learn new ways to help their children achieve in school. That they can learn and use behavior modification principles and techniques to enhance their children's achievement, has important implications for educators. The significance to counselors, teachers and administrators seems obvious. The more support and encouragement a child receives at home the easier it becomes for educators to help children develop their human potential. Counselors could set up self-concept enhancement programs for parents, while administrators could provide the necessary support.

Training group leaders to conduct parent workshops is not difficult and can be done in a relatively short time. All three group leaders, two of whom were young second-year teachers, had only one formal semester course in behavior modification and four special training sessions for working with parents.

Eight hours of video tape were recorded during the parent workshops and reduced to a thirty-minute documentary and training tape. This should be useful for anyone planning similar programs with parents.

Finally, the fact that the principles and techniques can be learned in groups, means that there is hope in reaching the large numbers of parents and children who need and can benefit from application of reinforcement theory.

Limitations of the Study

The treatment period for the parents lasted only three months. As many of the parents said in their evaluations, continued parent meetings at least once a month for another six months, would have added much to the continuation and acceleration of the initial results.

Selecting subjects whose grade-point average is below the mean, without regard for innate academic potential, made certain assumptions that tended to dilute the results. An example was a student with an I.Q. of 85 who, prior to treatment, was achieving with a grade-point average of 2.5, and had an above-average self-concept of ability. The assumption that all children below the mean can significantly benefit from a program that attempts to enhance self-concept and academic achievement is fatuous.

The size of each group was smaller than anticipated, making statistically significant results more elusive.

The placebo parent group was chosen from those parents who agreed to attend the workshop, but did not turn up at the first meeting. Although the pre-treatment parental perception scale showed no significant difference between the parent experimental and placebo groups, it is recognized that the parent placebo group might not have been a comparable sample.

The purpose of having the parent placebo group was to take into consideration the "Hawthorne effect" on an experimental group. The treatment given this placebo group,

however--articles that related to parent-child-school relationships--was too closely related to the objectives of the experimental parent group, and could easily have reduced the variance in the results.

The Michigan State Self-Concept Scale had high reliability coefficients. However, most of the questions, directly or indirectly, used teacher grades as the criterion for assessing self-concept of ability. Since teachers' grades are not always sensitive to changes in children's achievement and are not considered statistically reliable, especially between different teachers, the study was restricted by the limitations of this scale.

Two of the classes were taught by Teacher Corps teachers prior to the treatment period and by regular teachers during the treatment period; for two other classes, the reverse was true. The mean grade-point average given by Teacher Corps teachers was .98 higher than the regular teachers in the same grading period. This resulted in lower grades for many of these students following treatment. The effect on self-concept due to this absence of reinforcement cannot be discounted.

The process of enhancing self-concept was, necessarily, influenced by the author's understanding of the human potential--a belief in the innate "goodness" and value of each individual. The use of behavior modification in this study was based on this assumption.

Suggestions for Further Research

Very few studies have been done to investigate viable ways to enhance self-concept of ability, and hence, academic achievement. The need for additional research in this area is desperate. Replications using other age groups and other geographic areas, should be done.

A study of parent groups undergoing treatment is needed. Ratings of parents that would reveal proficiency of learning, change in attitude, optimum group size and ideal length of treatment would be very useful.

Alternative scales to measure self-concept of ability should be developed that do not rely so heavily on a child's use of grades as a criterion for comparison of himself with other children. Since self-concept is such an amalgam of learned phenomena, it would be helpful to have sub-scales developed to measure such aspects of "self" as race, religion, physical appearance, or heritage. Only when we can pin-point and measure the various percepts of "self" will we be able to know if our methods of enhancing self-concept are valid.

BIBLIOGRAPHY

Allport, G. W. 1955. Becoming. New Haven, Connecticut: Yale University Press.

Allport, G. W. 1966. Pattern and Growth in Personality. New York: Holt, Rinehart and Winston, Inc.

Allport, G. W. 1937. Personality: A Psychological Interpretation. New York: Holt, Rinehart and Winston, Inc.

Ausubel, D. P. and Ausubel, P. 1963. Ego Development among Segregated Negro Children In Education in Depressed Areas. H. A. Posson (Ed.), New York: Bureau of Publications, Teachers College, Columbia University.

Baer, D. M. and Wolf, M. M. The Entry into Natural Communities of Reinforcement. Paper read at A.P.A., Washington, D. C.

Bahaullah 1939. From S. Effendi, Gleanings from the Writings of Bahaullah. Wilmette, Illinois: Bahai Publishing Trust, Pg. 260.

Bandura, A. and Walters, R. H. 1959. Adolescent Aggression. New York: Ronald Press.

Bandura, A. and Walters, R. H. 1963. Social Learning and Personality Development. New York: Holt, Rinehart and Winston.

Bandura, A. 1969. Principles of Behavior Modification. New York: Holt, Rinehart and Winston.

Becker, W. C. 1971. Parents Are Teachers. Champagne, Illinois: Research Press Co.

Bernal, M., Duryee, J., Pruett, H. and Burns, B. 1968. Behavior modification and the brat syndrome. Journal of Consulting and Clinical Psychology, 32(4), 447-55.

Bledsoe, J. 1967. Self-concept of children and their intelligence, achievement, interests and anxiety. Child Education, 43:436-38.

Bodwin, F. B. 1957. The Relationship between Immature Self-Concept and Certain Educational Disabilities. Doctoral thesis: Michigan State University.

Borislow, B. 1962. Self-evaluation and academic achievement. Journal of Consulting Psychology, 9:246-54.

Brookover, W. B. 1959. A social-psychological conception of classroom learning. School and Society, 87:84-87.

Brookover, W. B., Patterson, A. and Thomas, S. 1962. Self-Concept of Ability and School Achievement. U.S. Office of Education, Cooperative Research Project No. 845, East Lansing: Office of Research and Publications, Michigan State University.

Brookover, W. B. 1964. Self-concept of ability and school achievement. Sociology of Education, 37:271-78.

Brookover, W. B. et al. 1965. Self-Concept of Ability and School Achievement II: Improving Academic Achievement Through Students' Self-Concept Enhancement. U.S. Office of Education, Cooperative Research Project No. 1636, East Lansing: Office of Research and Publications, Michigan State University.

Brookover, W. B., Erickson, E. L. and Jorner, L. M. 1967. Self-Concept of Ability and School Achievement III: Relationship of Self-Concept to Achievement in High School. U.S. Office of Education, Cooperative Research Project No. 2831, East Lansing: Office of Research and Publications, Michigan State University.

Brooks, R. M. 1963. The self-system: A sociological analysis. Catholic Counselor, 8:27-30.

Cantrell, R. P., Cantrell, M. L., Huddleston, C. M. and Wooldridge, R. L. 1969. Contingency contrasting with school problems. Journal of Applied Behavior Analysis, 2(3), 215-220.

Caplin, M. D. 1969. The relationship between self-concept and academic achievement. Journal of Experimental Education, 37:13-16.

Carlton, L. and Moore, R. H. 1966. The effects of self-directive dramatization on reading achievement and self-concept of culturally disadvantaged children. Reading Teacher, 20:125-30.

Carlton, L. and Moore, R. H. 1968. Reading, Self-Directive Dramatization and Self-Concept. Columbus, Ohio: Charles Merrill Books, Inc.

Carpenter, T. R. and Busse, T. V. 1969. Development of self-concept in negro and white welfare children. Child Development, 40:935-39.

Carter, T. P. 1968. The negative self-concept of Mexican-American students. School and Society, 96:217-19.

Centi, P. 1965. Self-perceptions of students and motivation. Catholic Education Review, 63:307-19.

Clark, K. B. 1965. Dark Ghetto. New York: Harper and Row.

Combs, A. W. and Snygg, D. 1959. Individual Behavior. 2nd. Edition, New York: Harper and Row.

Combs, A. W. 1963a. The Relationship of Child Perception To Achievement and Behavior in the Early School Years. U. S. Office of Education, Cooperative Research Project No. 814, Washington D. C.: Department of Health, Education and Welfare.

Combs, A. W., Courson, C. E. and Soper, D. W. 1963b. The measurement of self-concept and self-report. Educational and Psychological Measurement, 23: 493-500.

Combs, A. W. 1965. The Professional Education of Teachers: A Perceptual View of Teacher Preparation. Boston: Allyn and Bacon, Inc.

Combs, C. F. 1964. Perception and self; scholastic underachievement in the academically capable. Personnel and Guidance Journal, 43:47-51.

Coopersmith, S. 1967. The Antecedents of Self-Esteem. San Francisco: W. H. Freeman and Co.

Coopersmith, S. 1969. Self-Concept Research: Implications for Education. Address to American Educational Research Association, Comentron, Los Angeles.

Crovetto, A. M., Fischer, L. L. and Boudreaux, J. L. 1967. The Pre-School Child and his Self Image. Division of Instruction and Division of Pupil Personnel, New Orleans Public Schools.

Cummins, R. E. 1963. Some applications of "Q" methodology to teaching and educational research. Journal of Educational Research, 57:94-98.

Davidson, H. H. and Lang, G. 1960. Children's perceptions of their teachers' feelings toward them related to self-perception, school achievement and behavior. Journal of Experimental Education, 29:107-18.

Deutsch, M and Associates 1967. The Disadvantaged Child: Selected Pages of Martin Deutsch and his Associates. New York: Basis Books, Inc.

Diller, L 1954. Conscious and unconscious self-attitudes after success and failure. Journal of Personality, 23:1-12.

Dixon, W. J. 1970. Biomedical Computer Programs. Berkeley, California: University of California Press.

Durr, W. K. and Schmatz, R. R. 1964. Personality differences between high-achieving and low-achieving gifted children. Reading Teacher, 17:251-54.

Dyson, E. 1967. A study of ability grouping and the self-concept. Journal of Educational Research, 60:403-5.

Edlund, C. V. 1969. Rewards at home to promote desirable school behavior. Teaching Exceptional Children, 6(4): 121-27.

Engen, M. 1959. The stability of the self-concept in adolescence. Journal of Abnormal and Social Psychology, 58:211-15.

Fink, M. B. 1962. Self-concept as it relates to academic underachievement. California Journal of Educational Research, 13:57-62.

Fitts, W. 1964. Tennessee Self-Concept Scale. Nashville: Counselor Recordings and Tests.

Frankel, E. 1964. Effects of a program of advanced summer study on self-perceptions of academically talented high school students. Exceptional Children, 30:245-49.

Frazier, A. and Combs, A. N. 1958. New horizens in the field of research: The self concept. Education Leadership, 15:315-28.

Gibby, R. G., Sr. and Gibby, R. G., Jr. 1967. The effects of stress resulting from academic failure. Journal of Clinical Psychology, 23:35-37.

Glasser, W. 1965. Reality Therapy. New York: Harper and Row.

Glasser, W. 1969. Schools Without Failure. New York: Harper and Row.

Gordon, I. J. 1966. Studying the Child in the School. New York: John Wiley and Sons, Inc.

Gordon, I. J. 1968. A Test Manual for the How-I-See-Myself-Scale. Florida Educational Research and Development Council, Gainsville: University of Florida.

Grossberg, J. M. 1964. Behavior therapy: A review. Psychological Bulletin, 62(2), 77-88.

Greenberg, J., Gerver, J. M., Chall, J. and Davidson, H. H. 1965. Attitudes of children from a deprived environment toward achievement-related concepts. The Journal of Education Research, 59:57-62.

Greenberg, J. W. 1970. Comments on self-perceptions of disadvantaged children. American Educational Research Journal, 7:627-30.

Greenberg, J. W., et al. 1965. Attitudes of children from a deprived environment toward achievement-related concepts. Journal of Educational Research, 59: 57-62.

Haarer, D. L. 1964. A comparative study of self-concept of ability between institutionalized delinquent boys and non delinquent boys enrolled in public school. Dissertation Abstracts, 25:6410.

Hamachek, D. E. 1971. Encounters with the Self. New York: Holt, Rinehart and Winston, Inc.

Harding, K. L. 1966. A Comparative Study of Caucasian Male High-School Students Who stay in School or Drop Out. Ph.D. dissertation, Michigan State University.

Harvey, W. R. 1960. Least-Squares Analysis of Data with Unequal Subclass Frequencies. USDA, Agriculture Research Services, ARS 20-8.

Hawk, T. L. 1967. Self-concepts of the socially disadvantaged. The Elementary School Journal, 67:196-206.

Hawkins, R.,Peterson, R., Schweid, E. and Byon, S. 1966. Behavior therapy at home: Amelioration of problem parent-child relations with the parent in a therapeutic role. Journal of Experimental Child Psychology, 4(1):99-107.

Helper, M. M. 1960. Parent evaluations of children and childrens self evaluations. Journal of Abnormal and Social Psychology, 56:190-94.

Hirsch, I. and Walder, L. 1969. Training Mothers in Groups as Reinforcement Therapists for their own Children. Proceedings of 77th Annual Convention of APA, 4(2): 561-2.

Hollingshead 1949. Elmstown's Youth. New York: John Wiley.

Holsinger, G. G. 1970. Behavior Modification: A New Approach to Changing Behavior. Lexington, Mass: Motivity Inc.

Homme, L., Baca, P., Cottingham, L. 1968. What behavioral engineering is. The Psychological Record, 18:425-34.

Keefer, K. E. 1966. Self-predictions of academic achievement by college students. Dissertation Abstract, 26:4337.

Kerlinger, F. N. 1964. Foundations of Behavioral Research. New York: Holt, Rinehart and Winston, Inc.

Krasner, L. and Ullmann, L. P. 1967. Research in Behavior Modification: New Developments and Implications. New York: Holt, Rinehart and Winston.

Krumboltz, J. D. and Thoreson, C. E. 1969. Behavioral Counseling: Cases and Techniques. New York: Holt, Rinehart and Winston.

La Benne, W. D. and Greene, B. I. 1969. Educational Implications of Self-Concept Theory. Pacific Palisades, California: Goodyear Publishing Co., Inc.

Leacock, E. B. 1969. Teaching and Learning in City Schools. New York: Bosi Books.

Lecky, P. 1945. Self-Consistency: A Theory of Personality. New York: Island Press.

Leonard, C. E., Pietrofesa, J. J. and Bank, I. M. 1969. A Workshop for the Improvement of the Self-Concept of Inner City Youngsters.

Long, B. H. and Henderson, E. H. 1968. Self-concepts of disadvantaged school beginners. Journal of Genetic Psychology, 113:41-51.

Lowther, M. A. 1963. Academic achievement and self-esteem. University of Michigan School of Education Bulletin, 35:7-11.

Manis, M. 1958. Personal adjustment, assumed similarity to parents, and inferred parental evaluations of the self. Journal of Consulting Psychology, 22:481-85.

McCarthy, J. L. 1965. Changing Parent Attitudes and Improving Language and Intellectual Abilities of Culturally-Disadvantaged Four-Year Old Children Through Parent Involvement. Doctoral Dissertation, University of Indiana.

McKenzie, H., Clark, M., Wolf, M.,Kothera, R. and Benson, C. 1968. Behavior modification of children with learning disabilities using grades as token reinforcement. Exceptional Children, 38:745-52.

Merrill, F. E. 1965. Social selves and social problems. Journal of Sociology and Social Research, 49:389-400.

Meyers, E. 1966. Self-Concept, Family Structure, and School Achievement: A Study of Disadvantaged Negro Boys. Ph.D. dissertation, Teachers College, Columbia University.

Morse, R. J. 1963. Self-Concept of Ability, Significant Others and School Achievement of Eighth Grade Students: A Comparative Investigation of Negro and Caucasian Students. Masters thesis, Michigan State University.

Morse, W. C. 1964. Self-concept in the school setting. Childhood Education, 41:195-98.

Opstad, M. 1961. Quoted in Boyd R. McCandless Children and Adolescents. New York: Holt, Rinehart and Winston, pg. 469.

Osgood, C. E., Suci, G. J. and Tannenbaum, P. H. 1957. The Measurement of Meaning. Urbana: University of Illinois Press.

Patterson, G. R. and Gullion, M. E. 1968. Living With Children: New Methods for Parents and Teachers. Champaign, Illinois: Research Press.

Pietrofesa, J. 1969. Self-concept: A vital factor in school and career development. Clearing House, 44: 37-40.

Purkey, W. W. 1967. The Self and Academic Achievement. The Florida Educational Research and Development Council, University of Florida, Gainsville, Florida.

Purkey, W. W. 1970. Self Concept and School Achievement. Englewood Cliffs, New Jersey: Prentice Hall, Inc.

Reeder, T. A. 1955. A study of some relationships between level of self-concept, academic achievement and classroom adjustment. Dissertation Abstracts, 15:2472.

Rogers, C. R. 1951, Client-Centered Therapy. Boston: Houghton Mifflin Co.

Rogers, C. R. 1959. Counseling and Psychotherapy: Theory and Practice. New York: Harper and Row.

Rogers, C. R. 1969. Freedom to Learn. Columbus Ohio: Merrill Publishing Co.

Rogers, C. R. and Skinner, B. F. 1956. Some issues concerning the control of human behavior: A symposium. Science, 124:1057-66.

Rosenberg, M. 1965. Society and the Adolescent Self-Image. Princeton: Princeton University Press.

Rosenthal, R. 1968. Teacher expectations for the disadvantaged. Scientific American, 218:19-23.

Russell, F., Stimbert, V. E., Tromontana, J., Haynes, M. and Morgan, S. 1970. Training Parents in Group Settings To Toilet Train Their Retarded Children. Unpublished study.

Runyon, R. P. and Haber, A. 1967. Fundamentals of Behavioral Statistics. Reading, Massachusetts: Addison-Wesley Publishing Co.

Sarbin, T. R. and Rosenberg, B. G. 1955. Contributions to role-taking theory: IV method for obtaining a quantitive estimate of self. Journal of Social Psychology, 42:71-81.

Shaw, M. C., Edson, K. and Bell, H. 1960a. The self-concept of bright underachieving high school students as revealed by an adjective check list. Personnel and Guidance Journal, 39:193-96.

Shaw, M. C. and McCuen, J. T. 1960b. The self-concept of bright academic underachievers: Continued. Personnel and Guidance Journal, 42:401-3.

Shaw, M. C. and Alves, G. J. 1963. The self-concept of bright academic underachievers: Continued. Personnel and Guidance Journal, 42:401-403.

Shaw, M. C. and Dutton, B. E. 1965. The use of parent-attitude research inventory with the parents of bright academic underachievers. In The Self in Growth, Teaching and Learning: Selected Readings, D. E. Hamachek (Ed.), Englewood Cliffs, New Jersey: Prentice-Hall, Inc., pg. 493-500.

Shoben, E. J. 1965. Quoted in R. L. Mosher et al., Guidance: An Examination. New York: Harcourt, Brau and World, pg. 118.

Silberman, C. E. 1970. Crisis in the Classroom. New York: Random House.

Skinner, B. F. 1961. Cumulative Record. New York: Appleton-Century-Crofts.

Skinner, B. F. 1963. Operant behavior. American Psychologist, 18:503-15.

Skinner, B. F. 1953. Science and Human Behavior. New York: Macmillan.

Smith, J. M. and Smith, D. E. P. 1964. Child Management. Ann Arbor, Michigan: Ann Arbor Publishers.

Soares, A. T. and Soares, L. M. 1969. Self-perceptions of culturally disadvantaged children. American Educational Research Journal, 6:31-45.

Soares, A. T. and Soares, L. M. 1970. Critique of Soares and Soares self-perception of culturally disadvantaged children--a reply. American Educational Research Journal, 7:631-35.

Steel and Torrie 1960. Principles and Procedures of Statistics. New York: McGraw Hill, Inc.

Stotland, E. and Zander, A. 1958. Effect of public and private failure on self-evaluation. Journal of Abnormal Psychology, 56:223-29.

Taylor, R. G. 1964. Personality and discrepant achievement: A review. Journal of Counseling Psychology, 11:76-81.

Teigland, J. J. 1966. Some concomitants of under-achievement at the elementary school level. Personnel and Guidance Journal, 44:950-55.

Terdal, L. and Buell, J. 1969. Parent education in managing retarded children with behavior deficits and inappropriate behaviors. Mental Retardation, 7(3):10-13.

Trowbridge, N. T. 1970. Self-Concept of Disadvantaged and Advantaged Children. Paper presented before the American Educational Research Association, Minneapolis, Minnesota.

Ullman and Krasner 1969. A Psychological Approach to Abnormal Behavior. New Jersey: Prentice Hall.

Ullman and Krasner 1965. Case Studies in Behavior Modification. New York: Holt, Rinehart and Winston.

Videbeck, R. 1960. Self-conception and reaction to others. Sociometry, 23:351-359.

Wahler, G. and Erickson, M. 1969. Child behavior therapy: A community problem in Appalachia. Behavioral Research and Therapy, 7(1):71-78.

Walsh, A. M. 1956. Self-Concepts of Bright Boys with Learning Difficulties. New York: Bureau of Publications, Teachers College, Columbia University.

Watson, J. B. 1930. Encounters with the Self. New York: Holt, Rinehart and Winston, Inc.

Wattenberg, W. W. and Clifford, C. 1962. Relationship of Self-Concept to Beginning Achievement in Reading. USOE Cooperative Research Project No. 377, Wayne State University, Detroit, Michigan.

Wattenberg, W. W. and Clifford, C. 1964. Relation of self-concepts to beginning achievement in reading. Child Development, 25:461-67.

Wolpe, J., Salter, A. and Reynor, L. J. 1965. The Conditioning Therapies: New York: Holt,Rinehart and Winston

Wolpe, J. 1969. The Practice of Behavior Therapy. New York: Pergamon Press.

Wylie, R. 1961. The Self Concept. Nebraska University Press.

Yates, A. J. 1970. Behavior Therapy. New York: John Wiley and Sons, Inc.

Yeatts, P. P. 1967. Developmental Changes in the Self-Concept of Children Grades 3-13. Florida Educational Research and Development Council, Council Research Bulletin No. 2, Gainsville: University of Florida.

Zeilberger, J., Sampen, S. and Sloane, H. 1968. Modification of a child's problem behavior in the house with the mother as therapist. Journal of Applied Behavioral Analysis, 1:47-53.

Ziller, R. C., et al. 1969. Self-esteem: A self-social construct. Journal of Consulting and Clinical Psychology, 33:84-95.

APPENDIX A

PUBLIC SCHOOLS
OF
WORCESTER

ELEANOR P. LOONEY, PRINCIPAL

BELMONT STREET COMMUNITY SCHOOL

CENTRAL ADMINISTRATION BLDG
20 IRVING STREET
WORCESTER, MASSACHUSETTS 01609
AREA CODE 617-798 2521

October 22, 1970

Dear

We have been looking at ways to help children do better at school. We have found that there are certain things that parents do that are particularly helpful in making their children want to do better in school.

An exciting new project is beginning this Fall that will pinpoint things that parents can do to make their children try harder in school. We would like to help you to learn about these new ways that parents are using to help their children.

Beginning in November we are going to have this special program in our area and you are one of 30 parents who will be invited to represent this school. This group will meet once a week on Thursday evening from 7 to 8:30 for nine sessions.

Parents will receive money for travel and baby sitting expenses.

This is a wonderful opportunity for you to help your child do as well as you know he can do and for you to let us know if you think such a program should be provided for all parents.

Please fill out the enclosed slip and mail in the self-addressed envelope before October 31, 1970. Soon after receiving your reply we will contact you to answer any further questions you may have.

Sincerely,

Principal

Enclosure (2)

I accept your invitation to attend the program for parents.

NAME _____

ADDRESS _____

_____

TELEPHONE NUMBER _____ NO PHONE _____

THE BEST TIME TO CALL ME IS: _____ Morning

_____ Afternoon

_____ Evening

APPENDIX B

PARENT PROJECT: Improving the Self-Image of Children by Parent use of Behavior Modification.

Session 1

Time	Purpose	Function	Needs
5	Introduction of Staff	The principles of the cooperating schools will introduce the teacher(s), aid and project director and welcome the parents	Principals
20	Get Base line Data	Administer self concept scale for parents	Self concept scales, overhead projector, pencils
30	Getting the group "together"	Each parent will have a namecard with a number on the bottom right corner. There will be duplicate numbers so that people with the same numbers will contact each other, interview each other and then introduce each other using a format: NAME BIRTHPLACE NUMBER OF CHILDREN WHAT ABOUT SCHOOL THEY LIKED LEAST	Aid take notes here of names and dislikes. Pencils Index card

Session 1--Continued

Time	Purpose	Function	Needs
15	Orientation of objectives of the program	Using a transparency and an overhead projector (or a large sheet of butcher paper) go over the objective and how we will achieve the objective. SEE DETAIL SHEET A for further particulars	(A) overhead projector transparency
10	HOME ACTION to begin techniques of OBSERVATION	Identify one negative behavior your child exhibits that may detract from his success at school, at home or with you or other members of the family, and write it on the slips just passed out. (Example: Says, "I can't"; swears; fights with brother; argues, etc.) Collect papers and pass out wrist counters, masking tape and daily chart. Instruct parents in use of counters and chart. SEE DETAIL SHEET B.	(A) Slips of preprinted paper with name of parent negative behavior (A) Wrist counters, masking tape, charts (A) Overhead projector, transparency
10		HOW TO OBSERVE YOUR CHILD	Transparencies
	Reinforcement of parents	Refreshments with comments about the INTEREST, EFFORT AND ENTHUSIASM OF THE GROUP. Discuss transportation and baby sitting payments.	(A) Coffee, tea donuts

Facilitator Suggestions:

Using an overhead projector (or a large sheet of butcher paper) with the objective and the "hours" listed deal with each one by bringing in the experiences of the parents especially when they were children:

- (OBJECTIVE) Psychologists say that most people use only 10% of their potential brain power. Does anyone here feel as though they or their child are now going at 100% of their abilities? (Hopefully no show of hands). Then perhaps we can all start off in agreement that not only our children can do better but even we experienced adults can learn to do better too--and that includes your instructor--me.

- "How" (1) Ask if anyone knows what self-image means. Get concrete examples from the parents if possible. Have one or two examples yourself to prime them if necessary. (Generally, how you think other people perceive you, but specifically, what we think we're good at and what we think we're not good at. I'm good at baseball but can't do math. People think I'm a scatter-brain, people think I'm a serious person.) Have the parent try to think back at their self-image when they were 6 graders and give examples. Have them try to think of their self-image now and give examples.

- "How" (2) Using some of the self-images that the parents expressed, especially when they were in sixth grade, connect to it effects of certain tasks. (Examples: You thought of yourself as being unimaginative, would you like to write compositions, draw pictures or express new ideas?

(B) If we think that we can't sew well or saw a board straight the chances are we won't even try. Kids have "notions"--sometimes very wrong about how good he is at a task such as multiplication. If he thinks he's no good at math, he may not even try or at best try "knowing it's probably going to be wrong" which may be worse since the chances are the result will prove his poor self-image is math.

- "How" (3) Again using some of the self-images that parents expressed, ask how they got to think of themselves that way. Try to show how parents influence the self-image of their children.

- "How" (4) This is our primary task and we wouldn't be here to tell you about it if we didn't think everyone here could understand and actually be able to use these change ideas.

Detail Sheet (B)

Wrist Counter - Be sure to emphasize that the wearing of the wrist counter will remind the parent to do the counting of the behavior and if possible to wear it all day so that you won't forget when your child comes home.

Daily Chart - Using the masking tape hang the chart on the refrigerator (high enough to keep away from reach of small children). This will remind you again of recording each day. Each evening record the number of counts and the approximate number of hours that your child was home that day and awake (don't count the hours asleep). DON'T TELL YOUR CHILD WHAT YOU ARE RECORDING UNTIL THE END OF THE FOURTH DAY (Monday). BRING CHARTS TO CLASS NEXT THURSDAY.

Session 2

Time	Purpose	Function	Needs
5	Introduction of new members	Facilitator ask "new members" to introduce themselves--then ask "old members" to do same.	
5	Review of Objectives	Using transparencies review objectives	Overhead projector transparencies
10	To learn how we learn	Using transparencies Section 1 "Social Learning". Cover the right side of transparency until after each item is read. And the parent has written the answer on a sheet of paper. Then compare it with the one on the screen. If the response is different, think about the difference in meaning. DO NOT ERASE, but have parent write suggested response beneath his written one. They may mean the same thing. Then continue with the next item.	Overhead transparencies, sheet of paper
10	Analysis of results of home action	Ask parents to turn in chart that they kept during the week. Try to ascertain if just charting has lessened undesirable behavior. If so, display a few samples. AS THE PARENT TURNS IN CHART REWARD WITH FLOWER FOR MOTHERS, PEN FOR FATHERS. MAKE A "THING" OVER EACH CHART TURNED IN.	Flowers, pens

Time	Purpose	Function	Needs
10	Home Action--Focus on new behavior	1. Determine appropriate behavior you want to replace undesirable behavior and FILL IN SLIP. 2. Reward each time you observe new behavior. 3. Count number of times child repeats new desirable behavior AND CHART. 4. IGNOR THE UNDESIRABLE BEHAVIOR. 5. Bring chart to class next Thursday.	Slips
20	To learn about reinforcers	Use Section 2 What Are Reinforcers as you did Section 1.	Transparencies
20	To decide on reinforcer for new behavior	Break into two groups and discuss each behavior and the reinforcer to be used. (Use the slip collected after parents decided on a behavior.)	
10	Reinforcement of parents	Refreshments served	

Session 3

Time	Purpose	Function	Needs
10	Analysis of charts	Collect charts and reinforce parents by showing other parents' charts with good gains.	
10	Home Action	NEXT WEEK COUNT AND CHART FIRST BEHAVIOR COUNTED DURING FIRST WEEK AND CHART. Following week (Thanksgiving) count and chart every time REINFORCEMENT IS GIVEN TO CHILD FOR ANY POSITIVE BEHAVIOR.	
60	GROUP (B) STRENGTH TRAINING	Chuck Kearney will demonstrate role playing techniques and then conduct role playing sequences using situations that the parents present as problems to them.	
60	GROUP (A) How to Reinforce	Section 3 transparencies to be used as before.	
10	Reinforce Parents	Refreshments.	

Session 4 - Group A

Time	Purpose	Function	Needs
10	Collect Data	Aide and graduate assistant collect charts. BE SURE NAME IS ON THE CHART. Aide read names from charts (after all are collected). Parents whose names are read will come to teacher for selection from grab-bag.	27 grab-bag items
5	Review of objectives	Use transparency to review objectives. EMPHASIZE THAT: We are learning techniques to help our children improve their self-image. Once their self-image is improved their achievement in school will also improve.	Objectives Transparencies
5	Review of what we have been doing	1. We started by learning to observe our child. We counted the number of times a certain bad behavior was repeated and charted the results daily. We found that just by counting and charting the behavior was reduced or eliminated. 2. Next we pinpointed a behavior that we wanted to replace the bad one and we counted and charted this new behavior and ignored the bad behavior.	

Time	Purpose	Function	Needs
		3. Over the last two weeks we were supposed to: a. Spend one week counting and observing the old behavior to see if it came back; b. Spend the second week counting and charting every time we reinforced a behavior that had something to do with school.	
60	Role play the behaviors charted during last 2 weeks	Chuck will take over here. Using the charts that were turned in, the teacher will select charts that indicate desirable results and encourage that parent to describe the behaviors. Chuck will then assume one of the roles and the parent will assume the other. The OBSERVING PARENTS WILL THEN COMMENT ON THE SKIT. EMPHASIS SHOULD BE ON: - IMMEDIACY OF GIVING REINFORCEMENT. - REINFORCING JUST APPROPRIATE BEHAVIOR. - IGNORING DEVIANT BEHAVIOR.	
5	Home action assignment	This week we are going to become aware OF OUR OWN BEHAVIOR. We are going to count and keep a chart of how many times we reinforce our child for any positive behavior that has to do with just starting school work at home. - Every time he picks up a book. - Every time he writes something on paper even pictures. - Every time he sits down to do his homework. - Every time he talks positively about school. Use chart transparency to be sure all are keeping chart correctly. BRING COUNTERS TO CLASS NEXT TIME.	Chart transparency

Time	Purpose	Function	Needs
5	Reinforcements		Refreshments

Session 5 - Joint Meeting - Ralph, Chairman

Time	Purpose	Function	Needs
5	Collect data	Be sure names are on all charts. Charts should be divided up between all group leaders, Chuck, Bill and Cheryl so that they can be quickly checked for completeness and interest. ANY CHARTS NOT SHOWING AN UNDERSTANDING OF HOW TO MARK OR KEEP THE CHART SHOULD BE GIVEN TO RALPH, JERRY, OR JOYCE SO THAT THEY CAN SEE THE PARENT DURING COFFEE TIME. Those Charts that "tell a story" should be singled out and the person reinforced. Turn in all charts at the end of the session.	
20	Group discussion on "worthwhileness"	The group will now divide into 3 groups of about 7 each. (Use both rooms) Groups lead by Jerry, Joyce and Ralph. The focus of the groups will be on one of the essential needs of all people, young and old, feeling worthwhile. Some questions that should be discussed: WHAT GIVES PARENTS A FEELING OF BEING WORTHWHILE? After discussing some general feelings try to have every parent identify at least one asset, skill, ability or success that makes him feel worthwhile. DON'T ACCEPT NONE. Have group observe one in the person even if it is a physical one.	

Time	Purpose	Function	Needs
		WHAT GIVES CHILDREN A FEELING OF BEING WORTHWHILE? Again after some general discussion, try to have each parent identify at least one personal asset, skill, ability or success that might make his child feel worthwhile. Examples: good at drawing, good observer (knows the year and make of all cars), can cook a whole meal, can fix things, tells an interesting story, good athelete, writes well, etc.	
60	Role play how parents can reinforce to build self-image and feeling of being worth-while.	Chuck will lead this portion (see detail sheet attached). Using wrist counter, parents will count each positive reinforcement they observe.	
5	Home action	Count and chart how many times we reinforce any behavior dealing with school work. GIVE CHARTS BACK TO PARENTS (EXCEPT THOSE WHO ARE NOT CHARTING CORRECTLY) SO THAT THEY MAY CONTINUE USING SAME CHART. ANNOUNCE NEXT WEEK VERY IMPORTANT LEARNING POINT GAMES ASSIGNMENTS FOR CHRISTMAS, ALSO: PARTY-PARTY.	
	Reinforcement	Refreshments	

Role Play Format

Since we are concentrating on enhancing self-image and "feeling worthwhile" has so much to do with self-image, we will try to use a format that will illustrate the typical parent-child relationship and then the same situation geared to making a child feel worthwhile.

Examples:

Typical Mom Mother has had a really bad day with the younger children. John our 6th grader comes home and Mom jumps on him with the "don't forget to wipe your feet and when you get your clothes hung up empty the waste basket that you forgot this morning."

Reinforcer Mom Mother has had a rough day. John our 6th grader comes home. Mom welcomes him, explains how she feels, and then reinforces him by telling him how she is worn out and how much she needs his able help now to cope with the situation with the younger children. "You're so good with Sue and Tony and they like to play with you so much would you spend a half hour with them while I rest?"

Typical Mom Suzie never seems to do things quite like Mom thinks they should be done. Suzie helps around but always seems to mess things up and get scolded.

Reinforcer Mom Same situation but Mom realized that Suzie's helping behavior is getting worse instead of better. Therefore, Mom decides to let Suzie fix the whole meal Saturday night. She can choose one of her

younger sisters to help but Mom promises to stay out of the kitchen since she now things that Suzie is capable to do the whole meal (leaves open any help Suzie might want in planning). Reinforces Suzie for anything she observes at the meal that exhibits behaviors she has stressed. Ignor the mistakes or omissions.

Typical Mom As Tom leaves the home in the worning to go to school there is a fling of last minute instructions and admonitions--are you wearing your sweater under your coat, you're five minutes late and I hope the teacher whips you, did you brush your teeth, you're hair isn't brushed, etc., etc.

Reinforcer Mom As Tom leaves Mom remembers one of Tom's positive qualities and says something like "I hope you get to tell a story today,you say things so interestingly and well" or "I know if anything in that school doesn't work today, you'll be able to fix it."

Session 6

Time	Purpose	Function	Needs
80	Learning the "Point Game"	Joyce will lead the combined group in learning to use "points" as reinforcers 1. How to set up game with your child. 2. How to choose the appropriate rewards that points may buy. 3. Role play of a typical parent-child relationship in setting up point game.	Work papers
10	Home action	Set up a point game with your child for a behavior that will be enhancing to his self-image.	

1. What is the behavior that you desire? What should the child be able to do?

2. Can the child perform the behavior?

3. What is the child doing now?

4. What is satisfying or pleasurable to the child? What will he work for?

5. How can the new behavior be started?

6. Are there rewards for small steps toward learning the new behavior?

7. Once the new behavior is learned, how can it be kept up?

8. Did the Plan work? Was there a change in behavior?

Session 7

Time	Purpose	Function	Needs
5	Restatement of objectives	Review the objectives as set up in the first meeting.	Sheet listing objectives
60	Determine point game results	Break up into 3 groups. Give each parent an opportunity to go over his behavioral objective, his reinforcer and scheme of operationalizing (where he kept the chart, who wrote in the points, etc.) Have the parent and then the group evaluate each point game after each presentation. Have each group choose one of the point games presented to give to the whole group.	
15	Role play of "before and after"	Whoever is chosen to present should choose as many others in the group to role play the before and after scene. The idea is to demonstrate the before behavior and then show how it is now being dealt with--including how the child was approached to become involved in the game.	
5	Home action	1. Continue point game (make adjustments as needed). 2. Use wrist counter this week to keep track of <u>every</u> time you reinforce your sixth grade child for <u>anything</u>.	Additional charts (see Joyce for masters)
5	Parent reinforcement	Tell the parents what a really good group they are and how the staff feels about them.	
		Refreshments	

Session 8

Time	Purpose	Function	Needs
5	Find the parent with the most reinforcements this week.	Collect the tallies from each parent and determine the one with the most reinforcements given this week. Give this parent a reward.	Reward for parent
55	To evaluate the total experience of each parent	Form two circles of equal numbers, an inner and an outer circle. Have the inner circle only discuss the total program: -what it has meant to them personally -what it has meant to their child -how it has effected their family. After there has been full discussion and everyone has had an opportunity to express himself, switch circle (the inner circle is now on the outside). Besides asking this group to do the same ask for ways the program could be improved or if there were parts they did not like.	
20	To evaluate the success of the point game	Form 3 groups using the three group leaders. Give each member of each group an opportunity to discuss the progress of his game. Encourage the parents in the group to evaluate the game being discussed. (Is it set up well, are the reinforcers viable, etc.?)	

Time	Purpose	Function	Needs
10	Final questionnaire	Pass out the questionnaire. Help parents who may have difficulty with reading.	Questionnaire pencils
	Parent reinforcement and announcements	Announce and discuss the plan for the final meeting and future meetings	

NOTE: Session 9 was a dinner meeting at which video tapes of some previous sessions were shown but it was intended to be a party atmosphere with the Superintendent of Schools, principals, and all others who worked with the project attending.

APPENDIX C

PUBLIC SCHOOLS
OF
WORCESTER

DANIEL R. O'NEIL, PRINCIPAL

GRAFTON STREET SCHOOL

GRAFTON STREET
WORCESTER, MASSACHUSETTS

Dear

I am sorry that you could not attend the parent class about which I wrote to you in October.

However, since you did express interest in wanting to come, I thought you would like to participate in a study that will help us to help our children. The first part of the study is to find out what parents think about their childrens' abilities in school.

Enclosed is a questionnaire that I would like you to fill out. HAVE IN MIND YOUR CHILD WHO IS NOW IN THE SIXTH GRADE WHEN YOU DO THE QUESTIONNAIRE.

Please return the questionnaire by December 21 in the stamped self-addressed envelope and thank you for your interest and cooperation.

Sincerely,

Daniel O'Neil

Principal dml

DO/dml
enc

PUBLIC SCHOOLS
OF
WORCESTER

ELEANOR P. LOONEY, PRINCIPAL

BELMONT STREET COMMUNITY SCHOOL

CENTRAL ADMINISTRATION BLDG.
20 IRVING STREET
WORCESTER, MASSACHUSETTS 01609
AREA CODE 617-798 2521

Dear

Thank you for returning the questionnaire.

The second part of the study is to ask you for your comments regarding a series of articles about parents and children. The first is enclosed.

Would you complete the questions and return the form in the envelope enclosed?

Many thanks.

Sincerely,

Eleanor Looney

Principal

EL/dml
enc

PUBLIC SCHOOLS
OF
WORCESTER

ELEANOR P. LOONEY, PRINCIPAL

BELMONT STREET COMMUNITY SCHOOL

CENTRAL ADMINISTRATION BLDG.
20 IRVING STREET
WORCESTER, MASSACHUSETTS 01609
AREA CODE 617 798-2521

Dear Parent:

Enclosed is another article that may be useful to you as a parent.

Over the next few weeks I will be sending you articles that relate to children especially pre-teenagers and I would appreciate it if you read them. I will be interested to know how you liked them.

Sincerely,

Eleanor P. Looney

Principal

PUBLIC SCHOOLS
OF
WORCESTER

ELEANOR P. LOONEY, PRINCIPAL

BELMONT STREET COMMUNITY SCHOOL

CENTRAL ADMINISTRATION BLDG.
20 IRVING STREET
WORCESTER, MASSACHUSETTS 01609
AREA CODE 617- 798-2521

March 10, 1971

Dear Parent:

I trust by now you have received and read the last of the six mailings of articles about parents and their children.

You were one of only 25 parents selected to receive these mailings to determine the value of this kind of parent involvement.

It is very important to us, therefore, that we hear from you. Would you please take the time now to complete the very short questionnaire concerning the articles and the little longer one concerning how you rate your child. (This is about the same as you did before -- but we would like this one too as a follow-up after your reading of the articles.)

The enclosed stamped envelope is for your convenience -- won't you do it today?

Sincerely,

Eleanor P. Looney (ks)

Eleanor P. Looney
Principal
BELMONT STREET COMMUNITY SCHOOL

EPL:ks

Enclosures

APPENDIX D

PARENT QUESTIONNAIRE

INTRODUCTION:

The answers you give will not be shown to anyone else.

Your help in this study is greatly appreciated.

PLEASE FILL IN THE FOLLOWING INFORMATION

Name: Mr. / Mrs. _____ _____ _____
(Last name) (First name) (Middle name)

Address: _____ Phone _____

Name of Child _____

Sex of Child: M _____ F _____

Circle the letter in front of the statement which best answers each question.

1. How do you rate your child in school ability compared with his/her close friends?

   a. the best
   b. above average
   c. average
   d. below average
   e. the poorest

2. How do you rate your child in school ability compared with those in his/her class at school?

   a. among the best
   b. above average
   c. average
   d. below average
   e. among the poorest

3. Where do you think your child would rank in his/her class in junior high school?

   a. among the best
   b. above average
   c. average
   d. below average
   e. among the poorest

4. Do you think your child has the ability to complete college?

   a. yes, definitely
   b. yes, probably
   c. not sure either way
   d. probably not
   e. no

5. Where do you think your child would rank in his/her class in college?

   a. among the best
   b. above average
   c. average
   d. below average
   e. among the poorest

6. In order to become a doctor, lawyer, or university professor, work beyond four years of college is necessary. How likely do you think it is that your child could complete such advanced work?

   a. very likely
   b. somewhat likely
   c. not sure either way
   d. unlikely
   e. most unlikely

Go on to the next page

7. Forget for a moment how others grade your child's work. In your own opinion, how good do you think his/her work is?

   a. work is excellent
   b. work is good
   c. work is average
   d. work is below average
   e. work is much below average

8. What kind of grades do you think your child is <u>capable</u> of getting?

   a. mostly A's
   b. mostly B's
   c. mostly C's
   d. mostly D's
   e. mostly E's

Put an "X" in the box under the heading which best answers the question. Answer for all four subjects. (You will have one "X" on each line).

1. How do you rate your child's ability in the following school subjects compared with his/her close friends?

	the poorest	below average	average	above average	the best
Mathematics	☐	☐	☐	☐	☐
English (Reading)	☐	☐	☐	☐	☐
Social Studies	☐	☐	☐	☐	☐
Science	☐	☐	☐	☐	☐

2. How do you rate your child's ability in the following school subjects compared with these in his/her class at school?

	among the poorest	below average	average	above average	among the best
Mathematics	☐	☐	☐	☐	☐
English (Reading)	☐	☐	☐	☐	☐
Social Studies	☐	☐	☐	☐	☐
Science	☐	☐	☐	☐	☐

Go on to the next page

3. Where do you think your child would rank in his/her high school graduating class in the following subjects?

	among the poorest	below average	average	above average	among the best
Mathematics	☐	☐	☐	☐	☐
English (Reading)	☐	☐	☐	☐	☐
Social Studies	☐	☐	☐	☐	☐
Science	☐	☐	☐	☐	☐

4. Do you think your child has the ability to do college work in the following subjects?

	no	probably not	not sure either way	yes, probably	yes definitely
Mathematics	☐	☐	☐	☐	☐
English (Reading)	☐	☐	☐	☐	☐
Social Studies	☐	☐	☐	☐	☐
Science	☐	☐	☐	☐	☐

5. Where do you think your child would rank in his/her college class in the following subjects?

	among the poorest	below average	average	above average	among the best
Mathematics	☐	☐	☐	☐	☐
English (Reading)	☐	☐	☐	☐	☐
Social Studies	☐	☐	☐	☐	☐
Science	☐	☐	☐	☐	☐

Go on to the next page.

6. How likely do you think it is that your child could complete advanced work beyond college in the following subjects?

	most unlikely	unlikely	not sure either way	somewhat likely	very likely
Mathematics	☐	☐	☐	☐	☐
English (Reading)	☐	☐	☐	☐	☐
Social Studies	☐	☐	☐	☐	☐
Science	☐	☐	☐	☐	☐

7. Forget for a moment how others grade your child's work. In your own opinion how good do you think his/her work is in the following subjects?

	much below average	below average	average	good	excellent
Mathematics	☐	☐	☐	☐	☐
English (Reading)	☐	☐	☐	☐	☐
Social Studies	☐	☐	☐	☐	☐
Science	☐	☐	☐	☐	☐

8. What kind of grades do you think your child is capable of getting in the following subjects?

	mostly E's	mostly D's	mostly C's	mostly B's	mostly A's
Mathematics	☐	☐	☐	☐	☐
English (Reading)	☐	☐	☐	☐	☐
Social Studies	☐	☐	☐	☐	☐
Science	☐	☐	☐	☐	☐

APPENDIX E

BIBLIOGRAPHY OF ARTICLES MAILED TO THE PLACEBO PARENTS

Armour, R. 1970. Humor to the rescue. Parents Magazine, 45:48-9+.

Davis, K. 1970. How well do you know your children? Parents Magazine, 45:39-41+.

Hoag, M. J. 1970. The middle years of childhood. Parents Magazine, 45:56-7+.

Johnson, R. D. 1969. Why so many teenagers fall for marijuana. Parents Magazine, 44:58-61+.

Parrish, P. 1969. How to help your child develop good study habits. Parents Magazine, 44:62-3+.

Scofield, N. E. 1970. What do you want to be when you grow up? Parents Magazine, 45:40-1+.

APPENDIX F

PARENT EVALUATION OF ARTICLES

Check one statement to each question that best describes your feelings.

A. How were the articles written?

_____ Easy to understand

_____ Somewhat difficult to understand

_____ Very difficult to understand

B. How was the content?

_____ Generally very interesting and useful

_____ Somewhat interesting and useful

_____ Generally not very interesting and useful

C. Check the three best articles.

_____ The Middle Years of Childhood

_____ Humor to the Rescue

_____ How Well Do You Know Your Child?

_____ What Do You Want to be When You Group Up?

_____ Marijuana

_____ How to Help Your Child Develop Good Study Habits

D. Comments

_____

_____

_____

_____

_____

Signed

_____

APPENDIX G

ADMINISTRATOR OF PUPIL SELF-CONCEPT SCALE

A. BEFORE DISTRIBUTION OF THE FORM SAY to class:

I would like you to take the next fifteen minutes to really think about yourself.

We are going to very honestly rate ourselves by answering several questions about ourselves.

Please take out a pencil.

B. DISTRIBUTE FORMS.

C. ASK PUPILS TO FILL IN NAME, SCHOOL, BIRTHDATE AND TO CIRCLE EITHER BOY OR GIRL.

D. SAY: Circle the letter in front of the statement which best answers each question.

READ THE QUESTIONS CAREFULLY--but don't spend much time thinking or worrying about any one question. BEGIN.